

# THE MILLING WORLD

AND

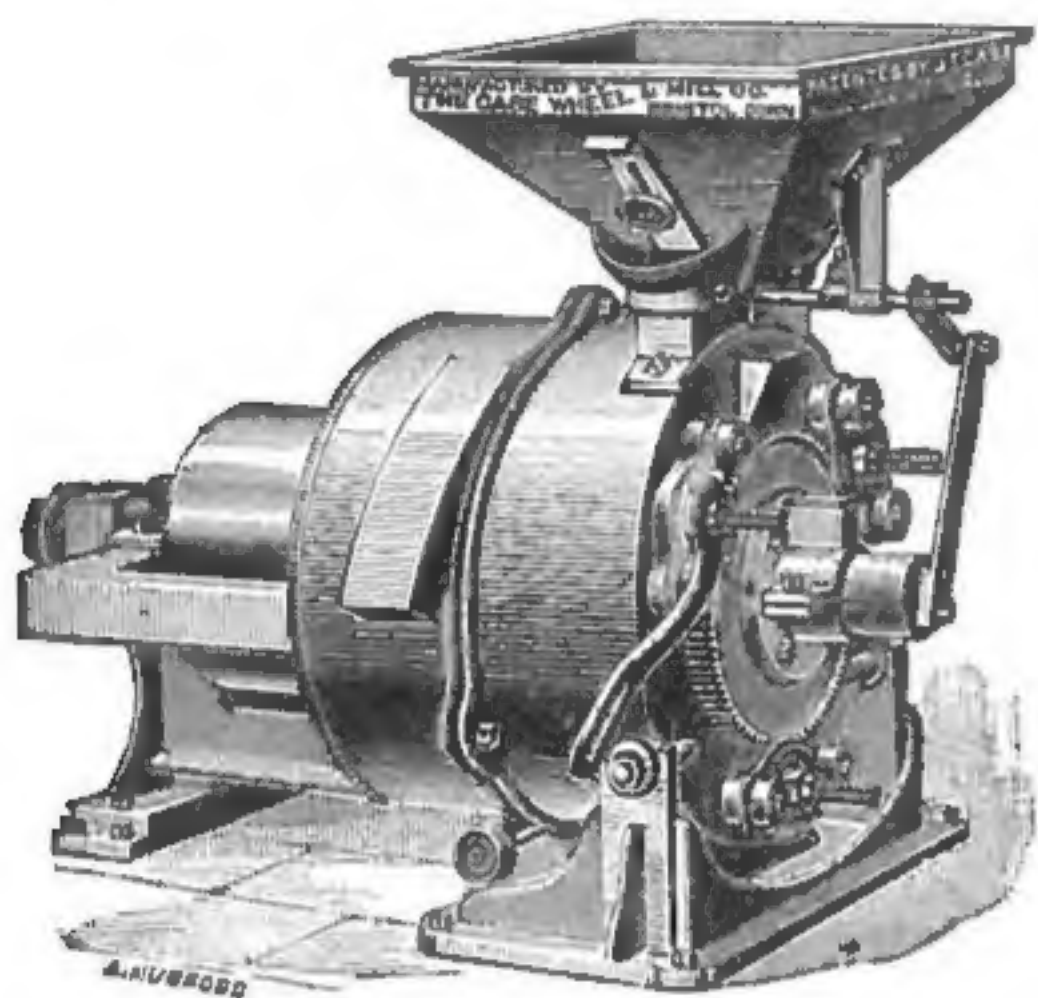
CHRONICLE OF THE GRAIN AND FLOUR TRADE

PUBLISHED EVERY MONDAY MORNING.

VOL. XXI. No. 23.

BUFFALO, N. Y., FEBRUARY 3, 1890.

\$1.50 PER YEAR.



## VICTORY OVER ALL OTHERS. SINGLE & DOUBLE VERTICAL GRINDING MILLS. (J. T. CASE'S PATENT.)

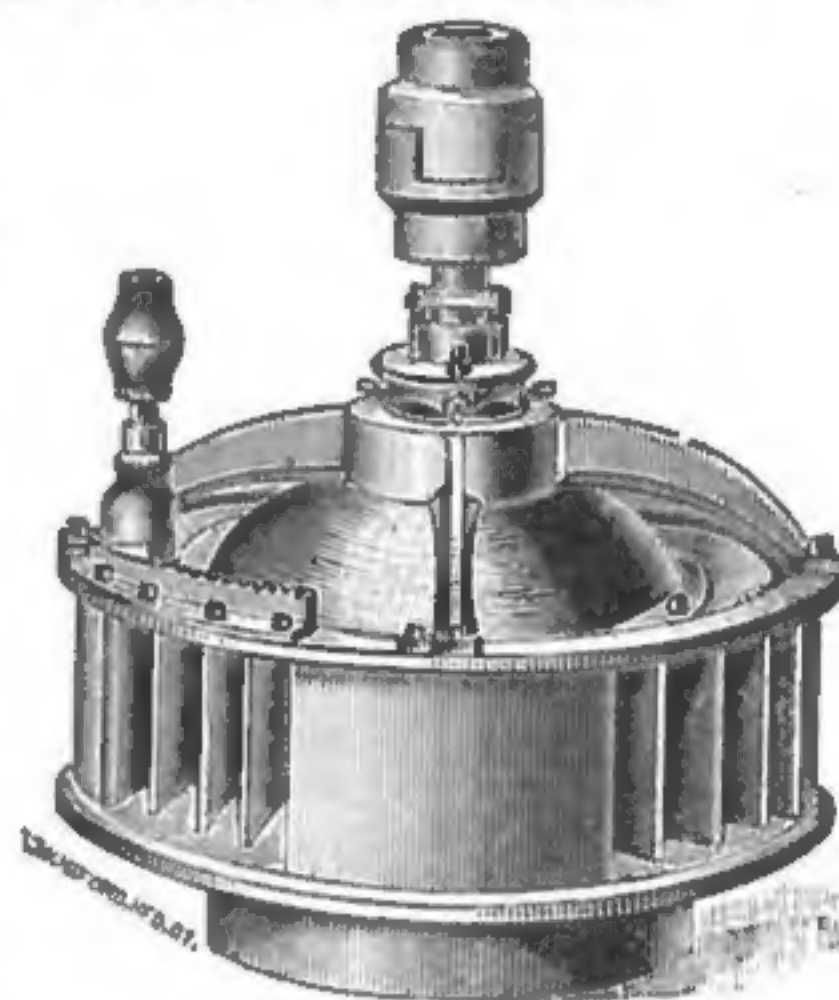
FACTS ARE MIGHTIER THAN ASSERTIONS. READ WHAT THEY SAY:

"Our 20-inch mill made by the Case Wheel & Mill Co. is in every respect satisfactory, easy to handle, and best results obtained of any mill in the country, with same quantity coal and power."—A. S. RUSSELL & Co., Meriden, Conn.  
"Superior to any mill in use."—GEO. WESTON, Bristol, Conn.  
"The best satisfaction in quantity and quality."—CHILD'S ELEVATOR, Manchester, Ct.  
"We take pleasure in recommending it."—GARLAND, LINCOLN & Co., Worcester, Mass.

SEND FOR CATALOGUE—ILLUSTRATED AND DESCRIPTIVE.

## The Improved National Turbine Water Wheel

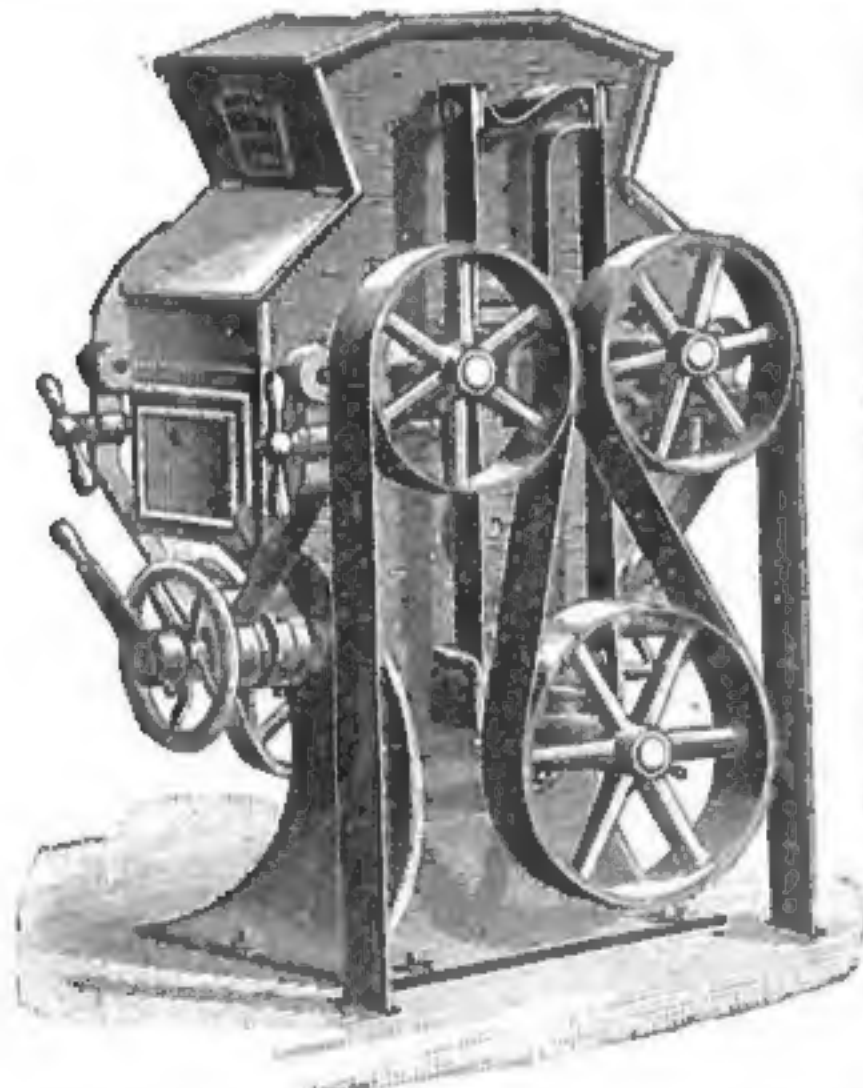
The Best for Economy; The Best for Durability; The Best for Power. ONE THOUSAND FIVE HUNDRED NATIONAL WATER WHEELS IN USE Prove that our Assertions are Supported by the Leading Manufacturers in the Country. Send for illustrated catalogue and prices to the manufacturers.



The Case Wheel & Mill Co., Bristol, Conn.

## THE "KEYSTONE" ROLLER MILL BEATS THEM ALL.

THE PROOF.



THE J. B. ALLFREE CO.

DEAR SIR: It has been a year since we started up the 50-barrel mill you built for us. We make four breaks on wheat, and will just say that we never, in our lives, seen or used any machinery for the manufacture of flour equal to this which you put in for us. The Roller Machines (Allfree's patent) can't be beat in the world for simplicity of construction. They have the best adjustments of any mill known, and we think we know whereof we speak. We have not had a break nor a jar since we started. We defy any man, or set of men, to produce a system of separation that will beat the Allfree System. We make two grades of flour which we call the first, or baker's flour, and the other the low grade; and out of the tests we have made, have, on a fair test from 60 lbs. of wheat, 44 lbs. of Crown Prince, or baker's flour, and 2 lbs. of low grade. Our Crown Prince sells a little higher in the market than other grades from other mills, and we have been complimented on our flour quite often, as it is always in demand. It takes less power to run this machinery than any we have seen; it will do more grinding, and do it easier than any mills we have used with the same amount of power. Our mill is built for a fifty-barrel mill. When the wheat is in good condition we make 65 barrels, and do it easy. Our trade has increased from the very start, and we have not had a single complaint. Our stock from this mill is always in demand, and we will say that if our brother millers want to get what there is in the wheat out of it, and get a flour that can't be beat anywhere, they had better adopt the Allfree System, for it will save them money dead sure. On the Allfree Rolls we have a double adjustment; we can set both ends of the rolls separate from each other, or, with a single hand wheel, change the whole roll at the same time. The adjustments on these rolls are worth two other makes, and if there is any miller who doubts this let him come and visit us and he can see for himself; we will take pleasure in showing any body that will come and see this mill work. Millers are always welcome.

We remain yours,

NORTH SALEM, IND., Dec. 8, 1888.

DAVIS & CLARK.

—ADDRESS—

THE J. B. ALLFREE CO., 76 to 86 Shelby St., INDIANAPOLIS, IND.

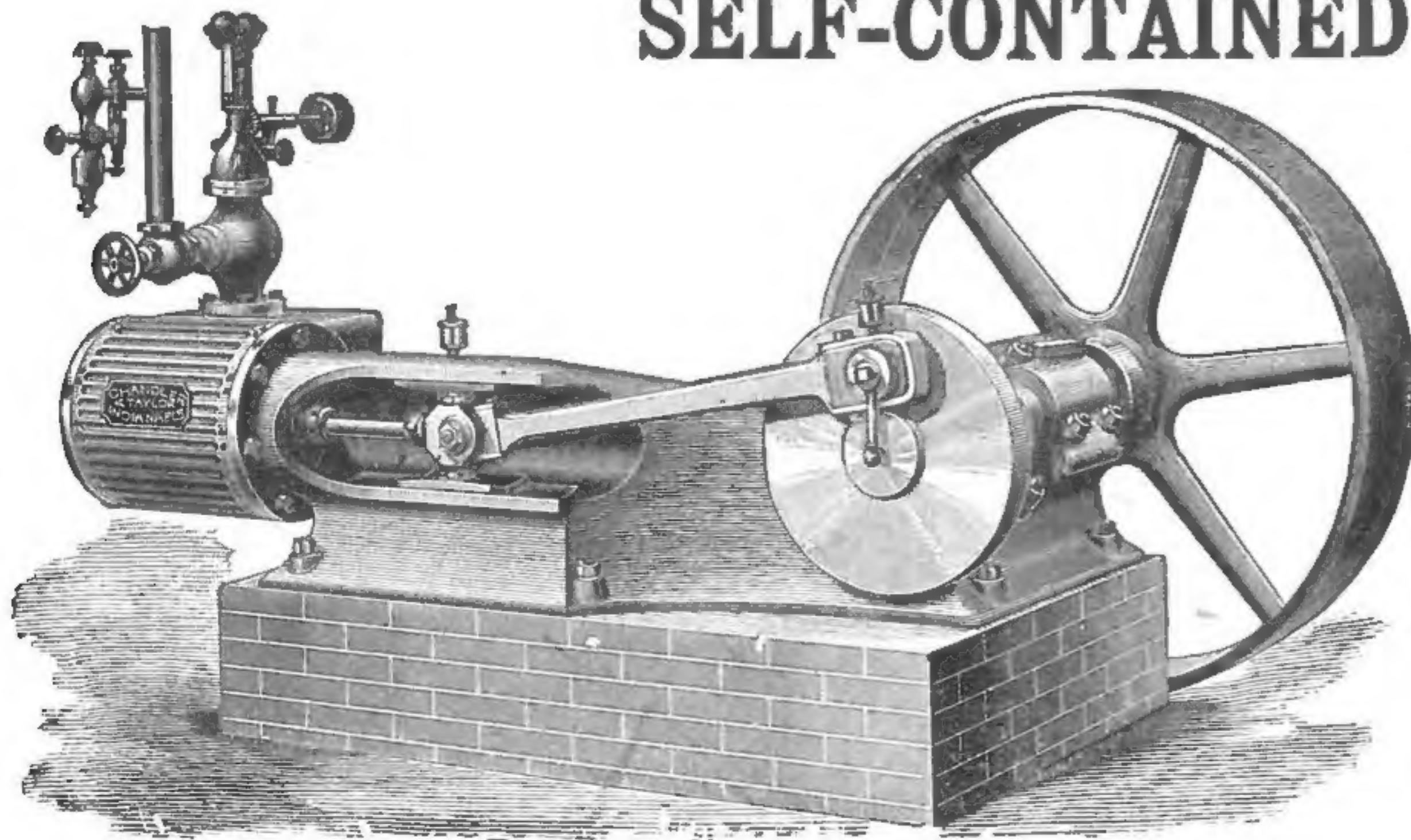
## SELF-CONTAINED STEAM ENGINES Stationary or Semi-Portable.

High Standard Maintained.  
Prices Greatly Reduced.

WRITE FOR NEW ILLUSTRATED  
CATALOGUE NO. 32.

Chandler & Taylor Co.  
Indianapolis, Ind.

Engines, Saw-Mills and Drain Tile  
Machinery a Specialty.



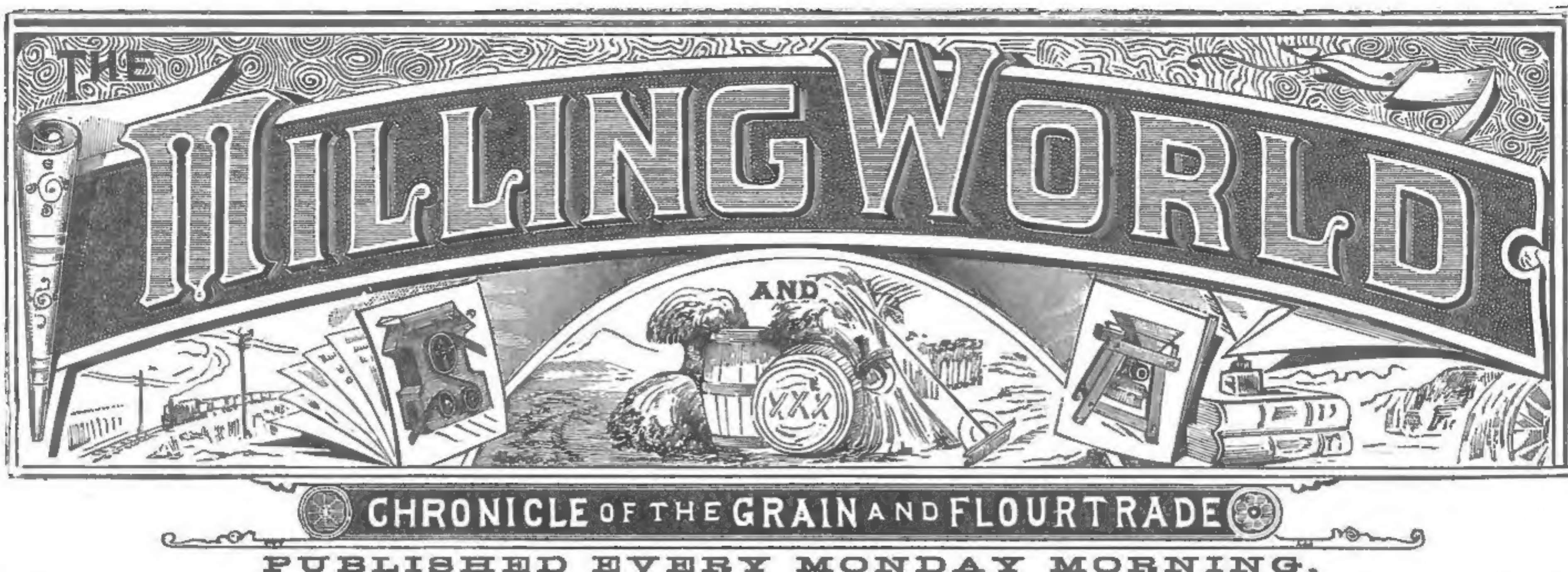


# CASE.

CASE MFG. CO., COLUMBUS, O.  
GENTLEMEN: If we were to build a hundred mills we  
would not permit any other than the "CASE" roll to  
enter them. They are the best roll on earth.  
Yours truly,  
W. C. MANSFIELD & CO.  
W. C. MANSFIELD & CO.,  
MERCHANT MILLERS,  
CLEVELAND, TENN., AUG. 29, 1889.

# CASE.





VOL. XXI. No. 23.

BUFFALO, N. Y., FEBRUARY 3, 1890.

\$1.50 PER YEAR.

WITH winter wheat "jointing" at the close of January, there is a chance for capricious weather to destroy a large part of the winter crop. Three months of unsettled weather, with possible zero snaps occasionally, may make winter wheat very tired towards harvest. Possibly our surplus from the crop of 1889 may yet become worth \$1.50 a bushel. It is highly probable that the peculiar winter conditions may result in a short crop this year. It may be our turn for a serious shortage this year.

It is pleasant to note that immigration into the United States in 1889 showed a falling off in comparison with 1888. During 1889 the number of immigrants arriving in the United States was only 426,738, against 518,526 in 1888, a decrease of 91,788, or about 17 per cent. We hope to see the figures for 1890 below 300,000. Of course the figures given above do not include the immigrants from Mexico and Canada. During 1889 Austria-Hungary sent us 42,174 immigrants, Germany 95,947, Great Britain 137,824, Italy 29,606, Russia 33,474, and Sweden and Norway 42,419. We would like to see Europe so prosperous during 1890 that not a single European will find it necessary to forsake his own country and come to the United States.

ENTERPRISE is not always recognized in Pennsylvania. A young miller of Greensburg, in that State, who recently found the competition of two neighboring millers unpleasant and unsatisfactory, contrived to get their mills cremated, hoping that the incineration of their plants would give him a great business boost. The rival mills were burned, but the enterprising instigator of arson, Frank Baer, was suspected, accused, proved guilty and sentenced to imprisonment at hard labor for 14 years and 4 months. Thus does the Keystone Commonwealth crush enterprise. We hope Frank will Baer his imprisonment in a spirit that will prove him middling well purified from any further mischievous tendencies to promote business by arson and incendiarism.

UNITED States Senator Teller in a recent debate contended that agricultural depression is not confined to the United States. It prevails in all the countries of the world except France. A recent parliamentary inquiry has shown that the British farmers have within twelve years sunk more than half their capital. The trouble is neither free-trade nor protection. Since the United States resumed specie payment in 1879, there has been a continuous drop in the prices of farm produce. The wheat crop of this year, with only a difference 8,000,000 bushels in quantity, was \$180,000,000 in value less than the wheat crop of 1880. The corn crop of this year was 500,000,000 bushels more than that of 1882, but it brought the farmers less. Evidently the American depression, great as it is, is far less than the European depression, whatever the cause of the depression may be.

AMONG our new advertisers in this issue is the well-known house of Cornish and Company, of Washington, New Jersey, manufacturers of fine organs and pianos. We take particular pleasure in calling attention to their advertisement. We have known the company for many years, and we have al-

ways found them strictly upright in all their dealings. Their instruments are all they claim them to be, and purchasers desiring first-class instruments at reasonable prices should correspond with them. Their specialty is the organ, and the Cornish organs are celebrated for the purity and sweetness of their tone, the beauty of their cases and the general excellence of their workmanship. Address them for their latest price-lists and illustrated circulars. They have a 20-year record of success to refer to, and they sell directly to customers, saving their customers all the money that usually goes to the "middlemen" who handle musical instruments.

THE first "forecasts," as they name crop prophecies in England, of the wheat crop in Punjab and the Central Provinces, India, recently published, are not highly encouraging to those interested in Indian wheat. The Punjab sowings were cut off by drouth, and in the Central Provinces also unfavorable weather hindered the sowings. Rain is badly wanted in many sections, and the insect pests are prevalent. On top of all this, the English "forecast" states that the "large trade of last year," which was really the smallest trade in six years, has "stimulated cultivation, and it seems likely that the area under wheat will fall little, if at all, short of last year," which was the shortest year in six, and then the peroration says: "The chances seem to point to some reduction in the outturn." The reader of this "forecast" will need a dose of antipyrin after reading to allay the inevitable cerebral disturbance. It is a fantastic "forecast," indeed, unequalled by any of the forecasting attempts of our American wheat-crop prophets. The oftener one reads it, the clearer it fails to become. It is a case of parallel palaver, an effort to say two separate things at once and the same time, with one and the same mouth, on the two sides of the same subject!

AN English market journal finds luxuriant crops of cereals in South America, with all the elements favorable and all the indications pointing to heavy wheat surpluses in Chili and the Argentine Republic. After pointing out that those two countries are simply staggering under heavy crops, the journal referred to says: "It does not seem unlikely that in 1890 both the eastern and the western seaboard of South America will prove equal to sending us a couple of million hundred-weights of wheat." Unfortunately for the hopeful writer of that fondly hopeful sentence, Chili reports a bad state of affairs and a prospect of a short wheat crop, and the Argentine situation has grown rather unfavorable, so that, instead of 2,000,000 hundredweight for export from those two countries, there is likely to be just about enough good wheat harvested for home needs. Indeed, if the bear reports that come through England claim a surplus of only 3,500,000 bushels in Chili and Argentine Republic, the prospect for those countries is dark. Last year these English bear reports claimed in advance a 9,000,000-bushel export surplus in the two countries, and both had to import grain on the last crop. Now, with the claim only one-third as large as it was last year, the only question seems to be how much wheat Chili and the Argentine Republic will need to import during the coming year.



# Dawson's Roller Mill

Is acknowledged to be the very best in the market. It has our Patent Automatic Centrifugal feeder, never failing to feed the stock the full length of rolls in an even sheet. It is the Latest and Best feed out, uses less power and is simple in construction. It can be placed on any style of machine with little expense. We use for roll bearings phosphor-bronze metal which will admit rolls being run at any speed without heating and with little friction, and uses little oil. We use the Dawson Corrugation, which is admitted the best in long or short system mills as the action is granulating rather than CUTTING.

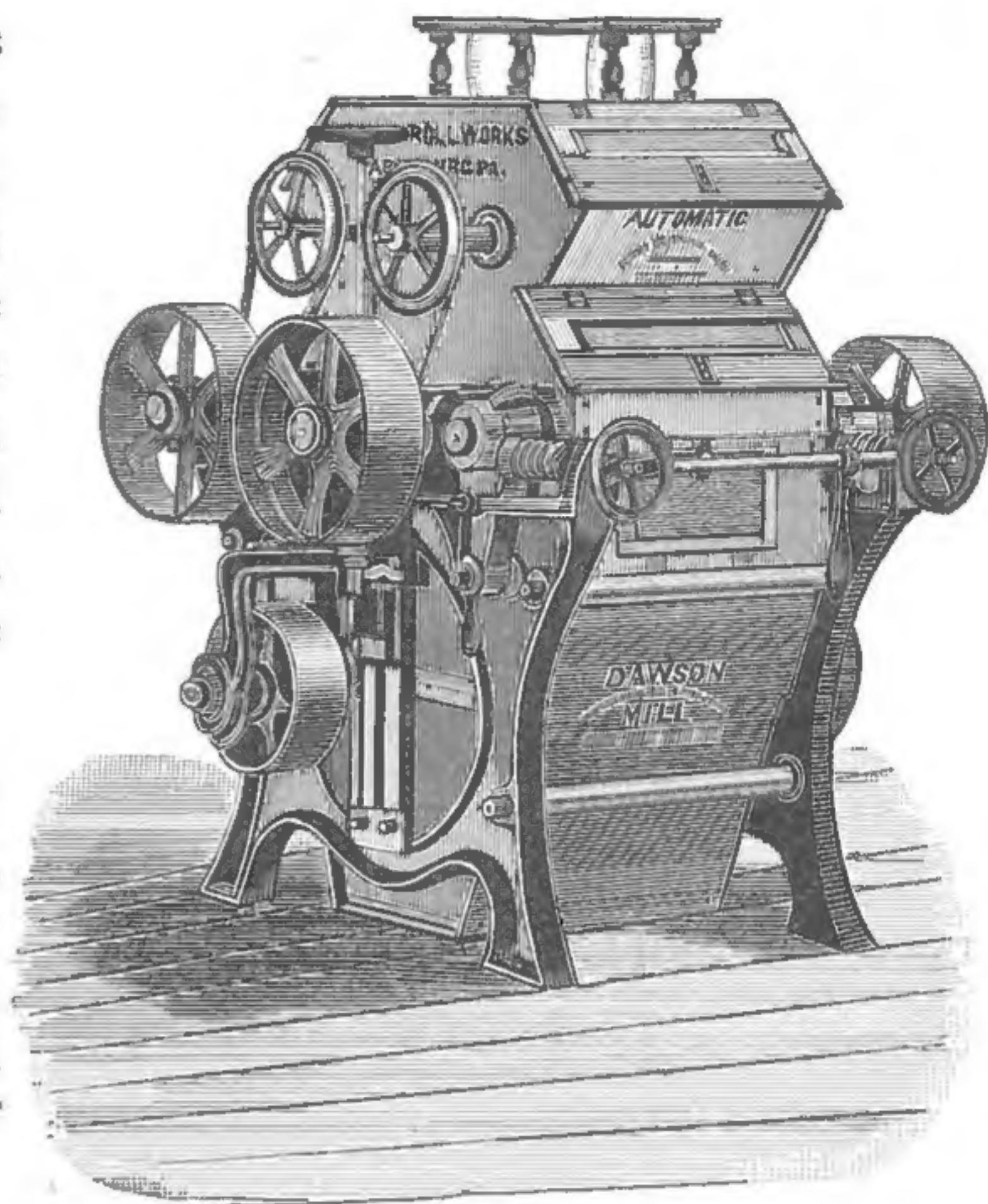
*We have a large plant to Re-grind and Re-Corrugate Rolls.*

Owing to our late increased facilities and central location we are enabled to ship goods promptly on the shortest notice.

PARTIES CONTEMPLATING REMODELING THEIR MILLS OR BUYING ANY ROLLER MACHINES ARE REQUESTED TO PUT THEMSELVES IN CORRESPONDENCE WITH US.

FOR PRICE LISTS AND CIRCULARS, ADDRESS,

## Dawson Roll Works, Harrisburg, Pa.



## The Cowles "Reliable" Sectional Wood Pulley

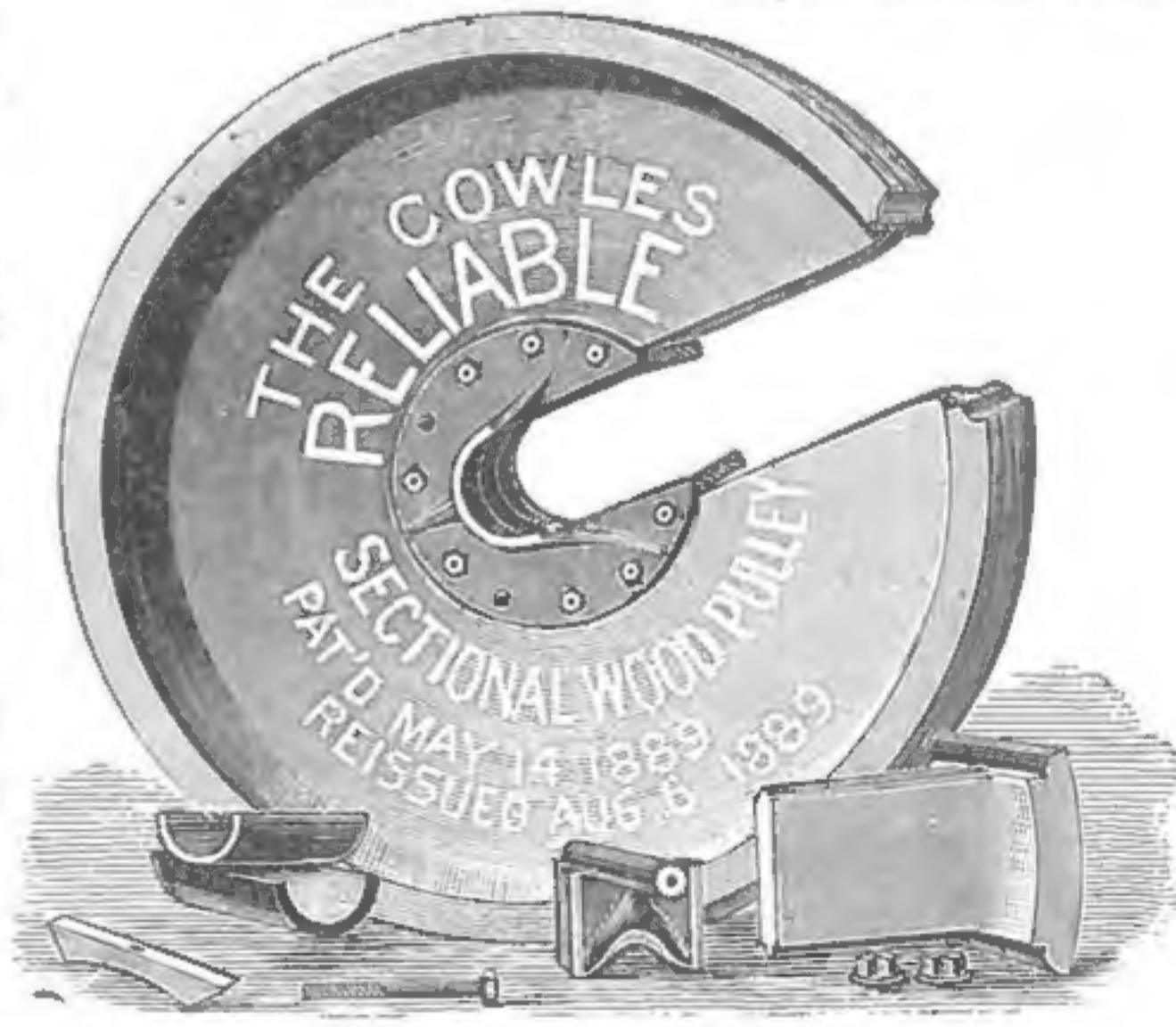
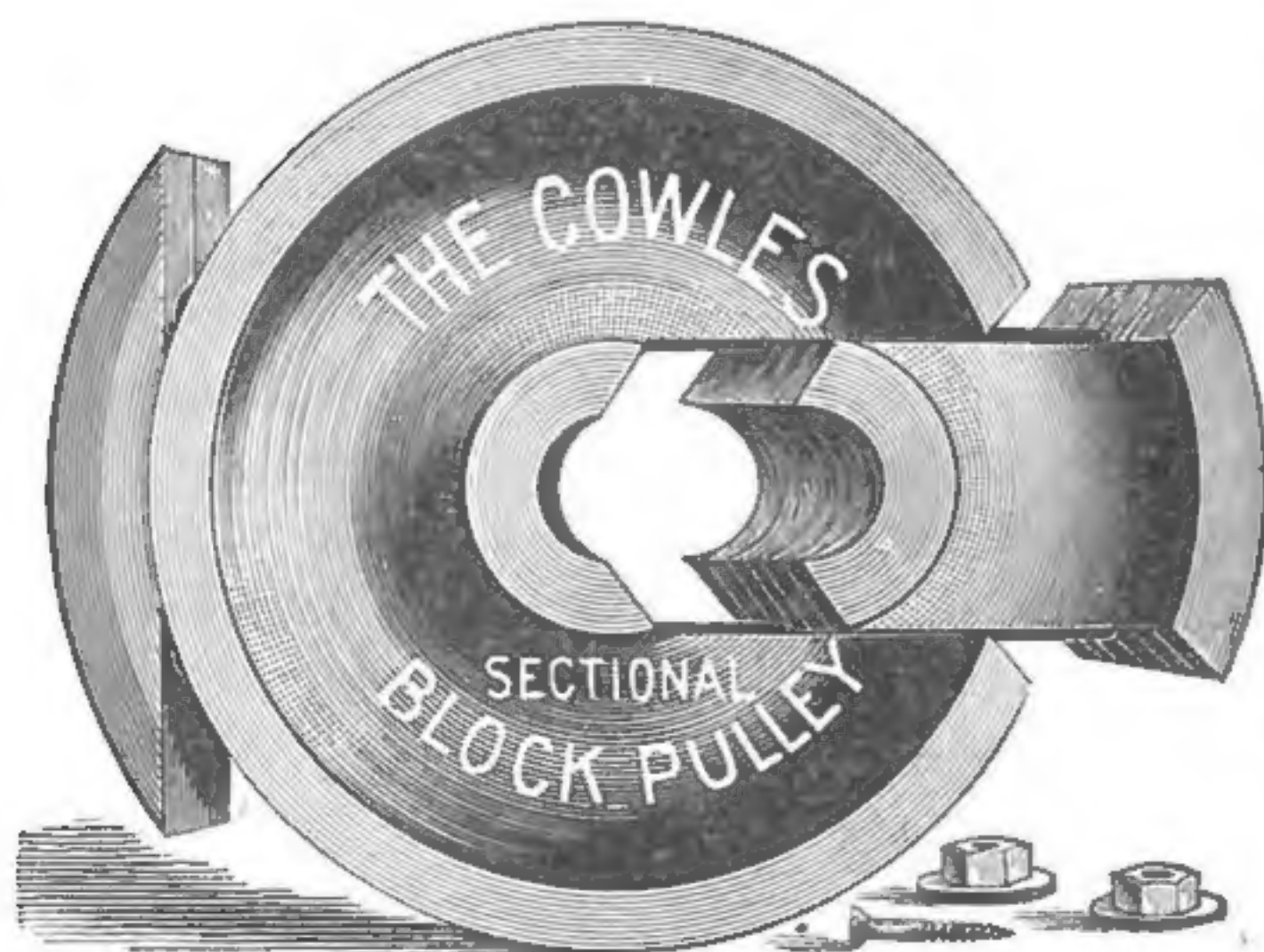


Web made of several layers glued together with grain crossing, and faced up on both sides. Iron flanges securely bolted to web. Rim put on after web has been trued up. Web and rim turned on inside and face, making perfect running pulley. Rim supported entire circumference. Positive self-gripping device for securing pulley to shafting, which is self-centering, and can not slip with wear.

A wooden rim pulley transmits from 30 to 50 per cent. more power with same belt than an iron one.

Two-thirds lighter than iron, bearings will wear longer and the expense for lubricant will be less.

Having solid web, there is no air resistance. The "Reliable" can be placed on shaft or position changed in one-fourth the time required with any other pulley.



**EDWARD GERMAIN, SOLE MANUFACTURER SAGINAW, MICH., U.S.A.**





PUBLISHED EVERY MONDAY. OFFICES: { Corner Pearl and Seneca Streets,  
Over Bank of Attica.  
McFAUL & NOLAN, - - - PROPRIETORS.  
THOMAS MC FAUL. JAMES NOLAN.

#### SUBSCRIPTION.

In the United States and Canada, postage prepaid, \$1.50 Per Year, in advance; remit by Postal Order, Registered Letter, or New York Exchange. Currency in un-registered letter at sender's risk.  
To all Foreign Countries embraced in the General Postal Union, \$2.25 Per Year, in advance.

Subscribers can have the mailing address of their paper changed as often as they desire. Send both old and new addresses. Those who fail to receive their papers promptly will please notify at once.

#### ADVERTISING.

Rates for ordinary advertising made known on application.  
Advertisements of Mills for Sale or to Rent; Partners, Help or Situation Wanted, or of a similar character One cent per word each insertion, or where four consecutive insertions are ordered at once, the charge will be Three cents per word. No advertisements taken for less than 25 cents. Cash must accompany all orders for advertisements of this class.

Orders for new advertisements should reach this office on Friday morning to insure immediate insertion. Changes for current advertisements should be sent so as to reach this office on Saturday morning.

#### EDITOR'S ANNOUNCEMENTS.

Correspondence is invited from millers and millwrights on any subject pertaining to any branch of milling or the grain and flour trade.

Correspondents must give their full name and address, not necessarily for publication, but as a guarantee of good faith.

This paper has no connection with a millfurnishing house and aims to represent the trade without prejudice, fear or favor.

Address all communications

**THE MILLING WORLD,**  
BUFFALO, N. Y.

Entered at the Post Office, at Buffalo, N. Y., as mail matter of second-class.

#### SITUATIONS WANTED.

Advertisements under this head, 25 cents each insertion for 25 words, and 1 cent for each additional word. Cash with order.  
Four consecutive insertions will be given for the price of three.

#### WANTED.

A situation in some flouring or grist mill, by a man who has had good experience with the buhr system. Can furnish best of references. Address, THOMAS H. NICHOLAS, DeRuyter, N. Y. 2225

#### SPECIAL ADVERTISEMENTS.

Advertisements of Mills for Sale or Rent, Partners Wanted, Machines for Sale or Exchange, etc., etc., cost 1 cent per word, for one insertion, or 8 cents per word for four insertions. No order taken for less than 25 cents for one insertion, or 50 cents for four insertions. Cash must accompany the order. When replies are ordered sent care of this office 10 cents must be added to pay postage.

#### FOR SALE.

Merchant and grist mill. The best water-power in Ohio. Situated five miles from Mentor, Ohio. For particulars enquire of C. S. JOHNSON, West Mentor, O. 1216

#### FOR SALE.

Mill property in Central New York, for much less than it is really worth, with small payment down, or would take a partner with small capital to take charge of and run the mill. Address "B," care of THE MILLING WORLD, Buffalo, N. Y. 2024

#### FOR SALE.

Several good second-hand and new turbines of various styles. Second-hand price list and descriptive matter and prices of our new machines sent free. Every one interested in the shortest route to successful milling on rolls or in grinding corn and feed with the least expense of power, should address us before buying.

FLENNIKEN TURBINE CO.,  
Dubuque, Iowa.

8tf

#### MILL MACHINERY FOR SALE.

One No. 0 Standard Combined Separator, Smutter and Brush Machine; new, best make.  
One 20-Inch Under-Runner Portable Mill, French Buhr Stone, capacity 10 to 12 bushels per hour; new, best make.  
One 14-Inch Vertical Feed Mill; best make, new, a bargain.  
One No. 6 Dustless Separator; new, a bargain.  
One No. 1 Full Rigged Combined Dustless Separator; new, a bargain.  
Four Corn Cob Crushers, right or left hand, driven from above or below, best make; capacity 40 to 60 bushels per hour.  
Three No. 1 Corn Shellers, capacity 200 to 300 bushels per hour; new.  
One No. 2 Purifier. New. Best make. A bargain.  
For particulars address, FRANK SMITH, care of THE MILLING WORLD, Buffalo, N. Y. 5tf

## FOR SALE CHEAP.

One 36-In. Iron Frame Portable Mill, French Burr Stone, Used about 2 months.  
One 20-In. Vertical Mill, French Burr Stone, Used about 30 days.  
Three Pair 42-In. Old Stock Feed Stones.

FOR PARTICULARS ADDRESS,

**SAMUEL CAREY, 17 BROADWAY, NEW YORK.**

#### FOR RENT.

Clinton Mills, at Black Rock, Buffalo, for rent on reasonable terms, recently repaired and put in good order. Apply to CHAS. DANIELS, over 311 Main Street, Buffalo, N. Y. 8tf

BRITISH writers on grain and flour matters are unanimous in the opinion that the United States will send to Great Britain less and less wheat grain, while sending more and more wheat flour. Evidently they have sized up the situation correctly.

CANADIAN millers will soon know whether or no they are to be relieved by the Dominion government from the straits in which they have been placed by the inequitable and disproportionate duties on imported wheat grain and flour. Their case has been laid before the authorities, and their doubts and fears will soon be settled. We are informed that the chances are not very favorable to the millers, although so strong a pressure has been brought to bear upon the authorities that they may fear to ignore the claims of the millers to protection. It must be remembered that they also fear the indignation of the consumers in the lower provinces, who strongly oppose an increase in the duty on imported flour. The authorities, who fear to make new arrangements that may cause the United States to retaliate by putting a duty on Canadian eggs and a higher duty on Canadian barley, are between the devil and the deep sea. The Canadian millers are in the deep sea, anchored by the inequitable wheat and flour tariffs.

ACCORDING to a Chicago statement, made January 25, reports from the wheat-bearing regions of the United States show that until the last week the winter wheat has been entirely bare of snow, with the exception of some places in Kansas and Missouri. The night of January 23 the first widespread snow of the season fell, extending over the southern area of the winter-wheat belt. The reports as to the general condition of the winter-wheat crop are conflicting, some areas reporting that the fields never looked better, others stating that the mild winter has stimulated insect growth and that the wheat is rank and tender. In Kansas the wheat fields at present are well covered with snow. The growth is vigorous and the general outlook of the crop is encouraging. For the last ten days in Missouri the ground has been covered with snow 7 or 8 inches deep. Before the present snowfall, wheat had been bare all winter. The weather was also mild and wheat was tender. Hence the present conditions are considered favorable. Until Thursday night the wheat had been bare in Central and Southern Illinois. The ground was more or less frozen and wheat had been growing so freely all winter that the roots were tender and any sudden sharp freeze was certainly dangerous to it. In Northern Indiana the wheat plant had a late start because of drouth. Many thought that this would injure the crop. Nevertheless the plants cover the ground well. The crop has been growing nearly all winter and is more tender than usual. In Central Indiana the wheat is considered too tender to stand hard freezing. In Ohio the wheat has been growing and perfectly green all winter. The ground is filled with moisture, and should it remain naked, with continuous freezing, there will be many brown fields in the spring. In Michigan the crop is generally regarded as in good condition. In the Province of Ontario the weather has not so far injuriously operated against the winter wheat. South of the Ohio River all conditions are found that have existed north of the Ohio, even in a more intensified degree. In Kentucky wheat was never during this season of the year in as forward a state as at present, and many report that their wheat to-day is almost as far advanced as it was last May. Wheat has been so rank that farmers have been pasturing it. A report from Southern Kentucky says that wheat has been jointing for four weeks and the late cold has cut it down. Reports from Tennessee say that the early wheat in Middle Tennessee is jointing and is thought to be in a critical condition. The late wheat is not far enough advanced to sustain any damage. Texas reports an unusually mild and open winter. Many farmers predict a poor wheat harvest as the consequence.



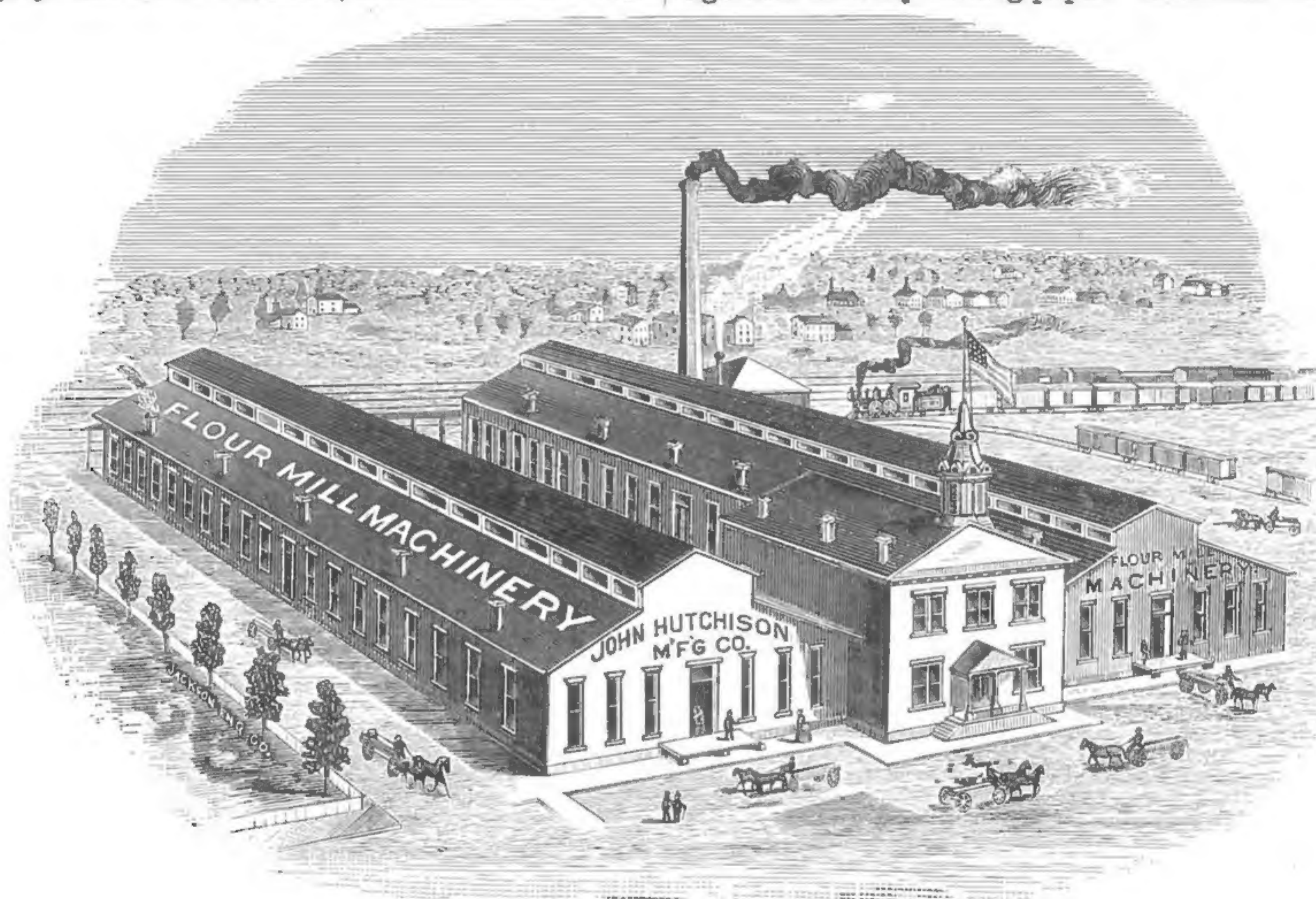
### A GREAT MILL MACHINERY HOUSE.

One of the most important business concerns in Jackson, Michigan, is the well-known John Hutchison Manufacturing Company, whose great flour-mill machinery manufactory is shown herewith. This company has grown rapidly in popular esteem, and it deserves all the prosperity it has achieved. The company was organized and incorporated in 1872, with a capital stock of \$100,000, and its success was assured from the start. The officers of the company are: John Hutchison, president; J. C. Dibb, vice-president; W. A. Reynolds, secretary and treasurer. Their trade extends into every State and Territory in the Union and into Mexico, where they have many patrons. Their new establishment is situated at the corner of Horton and Gurham streets, in the eastern part of Jackson, and covers more than an acre of ground. The buildings are brick and fire-proof and of modern design. Power is furnished by a 60-horse-power engine with a 75-horse-power battery of boilers. The general machine-shop is 60x150 feet in dimensions and the wood-working department is of equal size; the office building is two stories in height and 40 feet square, and the engine and boiler rooms are 30x40x18 feet in dimensions. The works provide employment for 80 workmen, and this number will

years and the latter for 15 years. From this fine establishment a flouring-mill can be equipped or remodeled throughout with the most improved machinery.

### CONCERNING THE "NATIONAL."

Philanthropic Brother Hall, of our esteemed cotemporary, "The Modern Miller," thinks we are unreasonable in our treatment of the Millers' National Association and of Secretary Barry, of that body. After intimating that recent events in Pennsylvania and Indiana indicate that the National Association is doing business at the old stand, and that the "opposition" of certain milling journals to the association and its secretary is based on no worthier a sentiment than that of hostility to the Minneapolis "Yahoo", the former "official organ" of the association and the particular friend of the secretary, Brother Hall goes on to say: "If the ex-organ now supports Mr. Barry, it is probably because Mr. Barry is an old friend of the paper, and it wants to see him succeed, and there is no valid reason why he, being a young man, full of ambition and possessing all the energy and qualifications necessary to the proper management of the Association, should not have the hearty support and encouragement of every milling paper. Mark our word, if this be



THE JOHN HUTCHISON MFG. CO.'S WORKS, AT JACKSON, MICH.

be augmented shortly. The company manufacture all kinds of flour-mill machinery of the most improved design, many original devices being patented and controlled and the practical efficiency of the mechanisms having been thoroughly tested, their merits recognized and their introduction into leading mills in the Union testifying to their superiority. Prominent among the lines of machinery manufactured are the "Rickerson," the original 6-inch 4-roller mill and all other sizes; round flour-dresser, scalping-reels, vibrating sieve-scalpers, aspirators, rolling-screens, 4-roller feed-mills and improved dustless corn-shellers, all these and many other designs being fully described in the handsomely illustrated catalogue issued by the company and sent to any address upon application. Four traveling salesmen represent the outside interests of the establishment. Mr. Hutchison, president of the company, has been a resident of the city for the past seven years. He is a recognized authority on the milling industry, conversant with the most scientific methods, and many of the improved designs manufactured for the facilitating of this line of work were invented by him. The Messrs. Dibbs and Reynolds are known among the representative citizens and business men of Jackson, as may be inferred from the great enterprise in which they are concerned. The former has been a resident of Jackson for 10

accorded him, Mr. Barry will make the Association a success; and we believe there is not a milling journal in the country that would not like to see a good National Association built up and maintained, for the good of the milling industry."

In the first place, the voting of the Northern Indiana and the Pennsylvania associations into the "National" has not added a particle of strength or influence to the "National." In the second place, there is no proof either that the millers of the country, as a class, are receiving any benefit from the "National," as now conducted, or even that they know that there is such a body in existence. They never saw a list of the members. They do not know whether it has 100 members, or 200 members, or even 50 members, out of a total of 20,000 millers in the United States. In the third place, those of the actual flour-makers who take the trouble to read the doings of the "National" see that it offers nothing for the benefit of the average miller and everything for the benefit of the exporter, the man who handles the flour after it has gone from the hands of the millers. In the fourth place, the claim that membership in the "National" protects millers from, while non-membership subjects them to, trouble, some and expensive litigation and injurious attacks by "patent sharks" engaged in "rascally" schemes, is one that is not borne out by the facts in the situation. In the fifth



place, there is not a single action of the "National," since the stepping down and out of the "official organ" and the "fighting secretary," that indicates that the managers of the association have any clearer idea of what would make the association attractive and satisfactory to the average miller than they had a year ago, or that their desire, or intention, to cater to the average miller is any stronger now than it was then.

What is to be expected from the same men acting on the same theories? Here in Buffalo, at the convention of the "National" in 1888, it was bluntly stated, by the most prominent orator in that meeting, that the "National" did not care for men owning small mills and doing a moderate business. He declared that the organization wished to draw in the more important millers, those owning mills grinding from 200 barrels a day upward. When or where has the "National" ever receded from that position? When or where has it ever shown that it includes the average miller in its calculations? It has been, and it is now, a narrow and exclusive concern, in which the millionaire element, the commission element, the exporting element and the speculating element are the only elements recognized, and in which the operative miller, the practical flour-maker, is as much a stranger as the devil would be in heaven. We agree with Brother Hall that all would like to see a comprehensive, powerful, influential and energetic association built up in the United States, but, unblinded by personal considerations and friendships, we do not pretend to be able to see in any one man enough executive ability to undo the work of years in the "National," and we do not propose to aid in making it appear that the "National" is what it is not, nor that it is doing what it is not doing, can not do, and does not even propose to do. The first men to object to making the meetings of the "National" valuable to the practical millers of the country, by the introduction of practical and scientific work, would be the millionaires in the association. They have no time for such work. It bores them. They consider the men capable of instructing the millers cranks. Recall, Brother Hall, with what scant courtesy, verging on absolute insult and ill-bred abuse, the "National" managers at the Buffalo convention treated the practical and scientific men whom they had invited to address the millers! You know it was shabby treatment, and you can not fail to know that the men guilty of it are the men who to-day control and tone the "National."

Concerning the personality of Mr. Barry we have only this to say. His friends have injudiciously thrust him forward as a man of marked powers, of wonderful resources and of almost limitless intelligence, while his speech at the Northern Indiana Association meeting shows him to be traveling faithfully in the foot-prints of the aggressive and over-zealous gentleman whose old shoes he now fills. His remarks about "patent sharks" and their "rascally" work, about "our enemies," and so on, show that his personal feelings are quite as likely to guide him as is any real appreciation of the situation. He can never transfer the old wine of the "National" to new bottles. He can never bring into the old "National" bottle enough new wine to endanger its integrity. We admit that he is bright, acute, talented and progressive, but we appreciate the amount of the influences that tend to nullify his qualifications. We are even willing to admit that the "secretary is all right," but we assert that the "National" is all wrong.

While we are at it, Brother Hall, will you take the trouble to give us the names of the gentlemen in the "National" who have ever expressed a desire to make that body acceptable to the small millers and who have ever attempted to draw in the thousands of owners of 150-barrel, 100-barrel, 75-barrel, 50-barrel and 25-barrel flouring-mills in the United States? We could use the names with good effect. Tell us, also, what benefit the owner of one of these small mills, so despised by the millionaires, would derive from belonging to the "National," as now conducted, or from attending its meetings and listening to endless tirades about bills-of-lading, bogus resolutions, export packages, and the other subjects that monopolize the attention of the "National" millionaires.

Portray the real help that would be given, in the Buffalo convention, for instance, to the flour-maker about to change from buhrs to rolls, or from water-power to steam-power. He does not care for export matters. He needs information about making flour, not about sending it to Europe.

There should be a real "national" organization of millers. No one doubts that. It should be a genuine millers' organization, in which due attention would be given to every detail of the great industry of making flour, from the first to the last. It should be an organization whose conventions would appeal to the old-fogy miller, the modern miller, the buhr miller, the roller miller, the water-power miller, the steam-power miller, the 10,000-barrel mill-owner, the 20-barrel mill-owner, the proprietor, the foreman, the second-miller and even the "cub-miller." Such an organization would do real good to the milling industry, but nothing is to be gained by claiming that the present "National" fills the bill, or that it can be made to fill, or that it cares to fill, the bill. The Freemans, the Pillsburys and the other big fish have no use for the small fish in the business, excepting when they can utilize them as food. Question your subscribers, Brother Hall, and see what they think of the "National." You will get some valuable pointers from them. Those milling papers which criticize the "National" are not "keeping up a senseless racket." The only "senseless racket" visible or audible is that kept up by the journals that persist in seeing in the "National" what is not in it, and in saying that it can or will do what it has openly asserted it does not care or propose to do. There are degrees of "senselessness," and we recommend to certain esteemed cotemporaries a careful study of "senselessness," both theoretical and applied.

#### THE GREAT FAILURE AT JACKSON.

Following is the account of the failure of the George T. Smith Middlings Purifier Company, of Jackson, Michigan, published by a newspaper of that city on January 14: Some time ago the stockholders of the concern became alarmed at the condition of affairs and requested Mr. Smith to retire from the management. This was done, Mr. Smith retaining only the nominal title of president. R. E. Emerson was elected vice president and manager, and Hon. Erastus Peck secretary. An examination of the books showed that the company was in a critical condition, but the new officers felt that they would be able to straighten matters out, as the company's credit seemed good and there were a great many orders on the books of the concern. On Friday last Cashier Hayes, of the Preston National Bank, of Detroit, arrived in the city and informed the officers that he had in his possession a document given the Preston bank last July by Geo. T. Smith, which was a transfer or bill of sale "setting over to said Preston National bank \$150,000 of the good and collectible accounts" of the Geo. T. Smith Purifier Company. The document was given as security for money borrowed before and since July last to the total amount of \$85,000. A meeting of the stockholders was held, but no means of meeting the demand were forthcoming, and on Saturday morning the document was filed with the city recorder. The company's indebtedness is stated to be \$484,000, and the nominal assets are placed at \$500,000, as follows: Accounts receivable \$110,000; Notes receivable \$100,000; Merchandise (goods ready for market) \$80,000; Plant and machinery \$160,000; Other real estate \$50,000.

The "notes receivable" are all pledged as collateral to various banks for money borrowed, including the Preston bank, of Detroit; the Jackson City bank, of Jackson; banks at Kalamazoo, Marshall, Albion and other places. The "plant and machinery" item is estimated, as is also the "other real estate." Mr. Smith states that the new works cost in the neighborhood of \$150,000. The concern is said to have made no money for some time, and the great expense of building the new works brought on the crisis. The \$65,000 paid by the city for the old shops is stated to have been used in paying up old debts, and the money spent in building the new works was borrowed. The books show that Geo. T. Smith was personally indebted to the concern in the sum of \$168,000, which will be increased to \$218,000 when all the returns



are in. It is supposed that the heaviest loser in Jackson will be W. D. Thompson, and after him the stockholders in proportion to the amounts of their stock. Very many city merchants will probably lose from \$50 to \$1,500. The stockholders are: George T. Smith, Alonzo Bennett, M. Harmon, George S. Bennett, R. H. Emerson, Erastus Peck, Z. C. Eldred, C. E. Bennett. The following is the sworn statement of the Geo. T. Smith Purifier Company, filed January 1, 1889: Capital \$300,000.00; Paid in \$300,000.00; Real estate \$82,520.19; Personal \$595,876.23; Debts \$66,811.45; Credits \$476,193.48.

At a meeting of the stockholders on 14th inst. it was unanimously decided that, owing to the precipitate action of prematurely frightened creditors, it was best that the corporation assign its entire corporative franchises and property, thereby enabling a satisfactory and complete adjustment of all controverted claims and demands, as well as the ascertainment of the assets of the company. Consequently the officers of the company announced that the Geo. T. Smith Middlings Purifier Company had assigned all its corporate property, both real and personal, to R. H. Emerson and Z. C. Eldred for the benefit of creditors without preferences. It appears by the schedules to be filed that the nominal assets equal the liabilities. Under the statute of 1877 the creditors of the concern who rendered work, labor and services will be paid in full, and it is thought that the patents in their full value will be paid.

The Jackson "Citizen" of January 16 contained an interview with Mr. George T. Smith, from which the following extracts are taken. Mr. Smith said: "As to my indebtedness to the Purifier Company, I have to say this: The books of the company show a large amount of indebtedness. My son and myself were a majority in the board of directors, and for this reason I did not desire to place my credits against the debits, preferring that this should be done at and by a meeting of the stockholders, as had been done in like cases before. At the time the new management was proposed, I called attention to my large account and insisted that the control of the company's affairs should not pass until this had been considered and adjusted. When this demand was made by me, there were present Mr. Thompson, Mr. Emerson and Mr. Gibson. I told these gentlemen I did not care to place my credits on the books with my son and myself as the only directors. I suggested that we might arrange the matter before the transfers were made, as Mr. Frank Bennett, one of the directors, was then sick. Both Mr. Thompson and Mr. Emerson assured me that my credits should be properly made and entered on the books of the company at once, and that I should not stand in a false light on the books. I call on Thompson and Emerson to verify this statement.

"This proper and honest adjustment of my account, as was at that time promised, has not been made, and I stand before the world as having taken for my own vast sums of money belonging to the company. A statement was made by the new management and my account given in direct violation of their promise to me, and this statements has been published and is a cruel injustice to me. As to the giving of my own notes to the company, I desire to say that there was a large block of capital stock in the treasury of the company, and a few years since it was decided to sell this stock to the stockholders of the company. I caused letters to be written to each and every stockholder calling for a meeting to sell such stock. I believe all were present and agreed to the sale. It was bought by George and Alonzo Bennett and myself, and we were to pay for the same with our notes, except as to Mr. Alonzo Bennett. This transaction was consented to by every stockholder in the company, and it is for this stock that I owe the company.

"I believe the assignment was a very foolish move. It has unnecessarily ruined the best manufacturing business in this country, which deplorable fact could have been avoided just as well as not. Mr. Emerson went into the management unfamiliar with the routine of a great business extending all over the globe. He was a stranger to the large credits and immense business scattered throughout England, Germany, South America, California and other sections remote from Jackson, including almost every State in the Union. In ac-

cepting securities it has often been necessary to have agents go and carefully examine property, to ascertain the quality and soundness of the security offered. This has been done mostly by Mr. Winn, who left our employ on the first of January, taking with him valuable information which cost the company a large sum of money to gather. It is my experience that often the best secured debt is among the last to be paid. It is for this reason that many of our customers are not commercially good, their signature to a note without other obligation being regarded as valueless. With us this class of notes were always carefully and best secured, and in most cases were the last to be collected, and usually the security would be required to meet the paper.

"Mr. Emerson found a large amount of paper, apparently worthless, and I think he did not take time to investigate its value, and therefore he hastily pronounced a large portion of it to be valueless. I believe, with my knowledge of the debtors, that much of this is as good paper as can be made. I learn that Mr. Emerson told those most familiar with the affairs of the company that he did not want any information from them concerning these matters."

It is stated that the failure was caused by the action of the Preston bank; what can you say in regard to this? "In regard to this I would say that Mr. Emerson was perfectly aware of this indebtedness, as it appeared on the books of the company, and visited Detroit for the purpose of arranging the continuance of the pleasant business relations between the company and that bank, which he said were perfectly satisfactory to him and the bank. A short time after Mr. Emerson had visited Detroit I received a telegram from Mr. Hayes, asking me to come and see him, but, being sick at the time, I could not go; but had a talk with Mr. Hayes by telephone, and he said he would come to my house, which he did. He told me that from a talk Mr. Emerson had with a gentlemen in Detroit he became frightened as to the object of the change in the management, and was fearful it would work harm to me and himself. I assured him that the gentlemen who had taken the management of the financial affairs of this company were gentlemen of the highest standing in the city and had come into the business to bring its financial credit up to the highest point. Mr. Emerson visited Dun's agency when in Detroit for this purpose. Hayes did not tell Mr. Emerson about the security I gave him, and which security was not to be sold or filed. I then told him I would apprise Mr. Emerson of it at once, as it would be better for me to do so myself.

"I thereupon rung Mr. Emerson up and told him that Mr. Hayes was with me, and I wanted to inform him, Emerson, of a matter connected with the bank that was very important. He replied that it was unimportant and rang off the 'phone. I again called him and told him I must see him at once, and would meet him at the Hibbard, although I was not well enough to do so. He replied that it would not be necessary, and I understood he was to see me before he talked matters over with Mr. Hayes, but he did not do so. Messrs. Dickey, Irwin and Eldred knew all about this paper, and any of them would have been very glad to have informed Mr. Emerson of that or any other business, if they had not been given to understand that no information was wanted. Mr. Hayes had an interview with Mr. Emerson, who up to this time had no intimation of the existence of this document. About this time a very hurried investigation of the affairs of the company had been made, including an invoice that had been taken in a surprisingly short time, which, I am informed, was not then entirely completed, but it appears was rushed to completion so as to lay before Mr. Hayes the statement which is now in the hands of the public. I am informed that this damaging statement was laid before Mr. Hayes and it was demanded that he should put up money to continue the business. This did not seem to please Mr. Hayes, as it was an unusual proposition. Hayes then said he would file a paper which he held, but at the same time expressed his belief that the company was solvent. This was the cause of the failure.

"The management became frightened and let the matter take the course it has. Another reason this company should



not have failed: At this very time a liberal offer had been made to the company by a syndicate to purchase the great shops and good-will of the business, preferring that we settle all our own business matters. I myself met these gentlemen of high standing, and they assured me that they believed that the good-will, together with the patterns, etc., was worth at least \$300,000, and the shops at a value with the lands of the company that would have made all interested perfectly satisfied. Now, as I understand matters, and as is usually the case, the avails of the company must be sold for a very nominal sum. As to the title of the patents, the statement alleged to have been made by me as to their ownership has not been correctly stated.

"I have done the best I was capable of doing and have worked hard to make the company a success, and I would have faced a loaded cannon's mouth before I would have seen such a calamity come upon it; and I can not help but believe, if the present management had come into the company with as much determination and had had a full knowledge of the great business, which I claim would require many months' hard labor fully to understand, as no one man could possibly go into such a business a few hours in a few days and learn of all its business and resources, the failure would not have occurred. My faith in our company may be judged somewhat by circumstances which I beg the privilege to relate: Some few months since I was the half owner of the Eldred mill, clear of any indebtedness. I sold this mill for capital stock of our company, taking for my pay the stock at double its par value."

In conclusion, Mr. Smith said: "The indebtedness to the Preston Bank could have been very easily secured with the large resources in the Purifier company known to me, had it not in the opinion of the management interfered with their interests in another direction. It can now be readily seen that such a course would have been better for all concerned, now that the wreck is nearly complete."

#### MILLING PATENTS.

Among the patents issued Jan 21, 1890, are the following:

Geo. V. Cline, Keokuk, Ia., No. 419,750, a feed-mill or grinding-machine, which comprises the combination of the main shaft carrying the rear buhr, the front buhr, the casing having the hopper, the feed-trough connected pivotally with the latter and having a forwardly-extended weighted arm, the clutch-collar mounted rigidly upon the main shaft, the longitudinally-sliding drum having a clutch to engage said collar, the interposed spring, a longitudinally-sliding collar adapted to bear against the rear end of the drum, a bell-crank lever operating said collar, a link-rod connecting said bell-crank lever with the pivoted feed-trough, a rock-shaft having an arm adapted to bear against a bracket projecting from the horizontal arm of the bell-crank lever, a hub mounted upon the said rock-shaft and having a stud or set-screw working in the peripheral notch therein, arms extending from said hub, a chain connecting one of said arms with the rear end of the pivoted feed-trough, a weight at the outer end of the other arm, and an arm hinged to the pivoted feed-trough and having a laterally-extending bracket bearing against the rear arm of the hub.

John Henry, Ardoch, Dakota, Nos. 419,947 and 419,948, an automatic grain-weigher, combining a receiver having two compartments and pivotally suspended between the arms of a forked scale-beam, hinged valves normally closing the bottoms of said compartments, a rock-shaft carrying a chute or platform underneath the supply-spout, adapted to be tilted thereupon to discharge into either compartment, a lever secured to the end of said rock-shaft, rods connecting the ends of said lever with the valve on the opposite sides of the middle of the receiver, and guide-stops in position to retain one arm of lever raised until scale-beam is tipped.

Andrew Hunter, Milwaukee, Wis., No. 419,954, a dust-arresting and collecting device, described as having the combination of an air-chamber with air-passages leading thereto formed in one wall thereof and air-outlets formed in the opposite wall, and series of narrow cloths suspended from the ceiling thereof at intervals, with spaces between

them, and other series of cloths similarly suspended, but arranged so that the spaces between the separate cloth of one series shall come opposite the cloths of the adjacent series, and thereby form zig-zag passages for the currents of air passing through the openings between said suspended cloths.

Wm. Z. Bevis, Cherokee Mills, Ga., No. 420,003, a combination millstone-pick.

Jos. L. Willford, Minneapolis, No. 420,026, a roller-mill.

*Scribner's Magazine* for February contains another article in the African series, by Herbert Ward, for five years an officer in the Congo Free State; the first of two articles on John Ericsson, by W. C. Church, his chosen biographer; the account of a visit paid to several leading Spanish novelists, by an American novelist; a short paper on a very ancient image recently found in Idaho; a glimpse of several picturesque Hungarian castles as seen by the author of "Is Life Worth Living?" and interesting illustrated fiction and poems, with the new department, "The Point of View." Col. Church's first paper on "John Ericsson, the Engineer," has been prepared under exceptional opportunities. Ericsson's executors have turned over to Col. Church about fifteen thousand letters and manuscripts, to enable him to write the biography of the great inventor, to be published this year. William Henry Bishop, the author of "The House of a Merchant Prince," describes, in "A Day in Literary Madrid," his pleasant interviews with Valera, Valdes and Galdos, the leading authors of modern Spanish fiction, some of whose works have been translated in this country. Their portraits, from recent photographs, accompany the article. W. H. Mallock, not long ago, spent six weeks at a castle in the very heart of Hungary, where he had the opportunity, as the guest of an old friend, to form part of the actual life of the place. His impressions of several typical castles are recorded in an interesting article, "Through Three Civilizations," illustrated from his own photographs. Eugene Schuyler, the well-known diplomatist, relates a curious consular experience which centered about the "Minnesota Heir to a Serbian King." G. Frederick Wright, author of "The Ice Age of North America," points out the importance, from an archaeological point of view, of the recently discovered Nampa (Idaho) image. The fiction of the number includes a short story, "Through the Gate of Dreams," by T. R. Sullivan. The two important serials, "In the Valley" and "Expiation" are showing remarkable strength of plot. There are poems by John Hay, C. P. Cranch, Graham R. Tomson, Archibald Lampman and Edward S. Martin. "The Point of View," the new department, contains brief and informal paragraphs about "Browning," "Men's Women," "First Loves," and "College Men."

#### A NEW METHOD OF TREATING DISEASE.

##### HOSPITAL REMEDIES.

What are they? There is a new departure in the treatment of disease. It consists in the collection of the specifics used by noted specialists of Europe and America, and bringing them within the reach of all. For instance the treatment pursued by special physicians who treat indigestion, stomach and liver troubles only, was obtained and prepared. The treatment of other physicians, celebrated for curing catarrh was procured, and so on till these incomparable cures now include disease of the lungs, kidneys, female weakness, rheumatism and nervous debility.

This new method of "one remedy for one disease" must appeal to the common sense of all sufferers, many of whom have experienced the ill effects, and thoroughly realize the absurdity of the claims of Patent Medicines which are guaranteed to cure every ill out of a single bottle, and the use of which, as statistics prove, has ruined more stomachs than alcohol. A circular describing these new remedies is sent free on receipt of stamp to pay postage by Hospital Remedy Company, Toronto, Canada, sole proprietors.

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## GENERAL NOTES.

THE oceans of the world contain 1,300,000,000,000,000,000 tons of water, in which are dissolved 36,000,000,000,000,000 tons of chloride of sodium or salt, and 1,141,000,000,000,000 tons of sulphate of potassium.

### WHEAT CLEANING.

J. MURRAY CASE.

#### II.

Up to within a very recent period all the cleaning the wheat received before grinding was simply an aspirating process produced by natural air currents. The wheat was threshed by the flail or tramped out by cattle and then carried in bags to a loft above the barn floor, and on windy days was shoveled down, and by the natural air current the chaff was separated from the wheat. Within a recent date this principle has been embodied in mechanical devices by which the air currents are artificially produced. The common hand fanning-mill was the first to appear; then came the smutter; then the gravity separator, by which means the wheat and light grains were separated by difference in specific gravity; then came the scourers and brush-machines; then the wheat-splitting machine, which is practically a wheat-cleaner. In the meantime many mechanical devices for cleaning wheat appeared and have been abandoned, but are constantly being re-invented by those who are not versed in the history of wheat-cleaning machines; and for the benefit of such inventors I will mention a few of these machines.

One is a machine commonly known as a "decorticator." It depends in principle upon a severe scouring action produced by cutting surfaces. One of the most common forms is that of a sandstone cylinder, within which are arranged rapidly running beaters, which throw the grain against the stone with sufficient force to cut away a considerable amount of bran, and also to produce an "ended" or scouring of the end of the berry. So far the system looks feasible and practical, and in operation it produces samples of pollard, or dust, which are very delusive. A great number of these machines were sold in America upon the basis of their samples. "You don't want that in the flour" was the argument; but the fact in time appeared that the large percentage of what appeared to be impure material was not foreign matter, but simply particles of bran. By passing the wheat through the second time, the third time, and so on until all the bran was cut away, the same samples appeared. It was also found that this severe abrasion destroyed the outer coating of the bran, which is the tougher part, so that, on passing the grain to the millstone or rolls, it broke up into finer particles and was more easily reduced into bran-powder, and therefore was an actual damage instead of a benefit. Yet it cost the millers many thousands of pounds to learn this.

Another form of this same principle consists of a series of rapidly running emery-wheels. The effect is precisely the same, but the machine can thus be made much smaller. I have had quite a number of customers that required me to put in these emery-wheel scourers in reconstructing their mills, forming their opinions upon the basis of samples, but in every case they have run the machines only for a short time and then thrown them out. Another form of this delusion is in the use of wire cardboard, the same as is used for carding wool, and placed around an inner and outer cylinder,

cone-shaped. This is less objectionable than the others, as the abrasion or cutting of the bran is not so deep, yet it does not leave that polished surface which the wheat berry should have in order to mill to the best advantage. So I may conclude that it is one of the demonstrated principles in wheat-cleaning that the berry should be cleaned and polished without destroying the outer coating of the bran, and for this cause all machines which produce a severe abrasion are objectionable.

There is another plan in wheat-cleaning worthy of mention, which has been discovered and re-discovered many times, and each inventor has dreamed of fortunes, palatial homes and world-wide honor and renown. That plan consists in the removal of the outer coating of the bran before grinding. The mechanical operation is a very simple one. It consists of damping the wheat, preferably with warm water, until the bran is thoroughly moistened, and then rubbing it with any kind of severe rubbing device, when the outer coating will peel off in large, light bran-flakes. This leaves the berry in a half pearly condition. The beards at the end are all removed, the cap over the germ is also removed, and the berry appears to be in a splendid milling condition. But experience demonstrates that the remaining bran has been so weakened by the removal of the outer tough coating that it readily pulverizes, and the advantages hoped to be gained are thereby neutralized. Besides this, the bran-scales are unsalable, and the power required to mill the wheat very greatly increased, besides the difficulty of wetting and drying. This plan was one of my own delusive phantoms some fifteen years ago.

But the fondest hopes my soul had ever known,  
Were doomed to vanish in a jiffy.

I believe it can be regarded as a demonstrated point in wheat-cleaning that any attempt to remove the outer coating of bran is injurious rather than advantageous.

The wheat-splitting machine or first-break in long-break-system milling I regard as strictly a wheat-cleaning process, as it adds nothing to the capacity of the succeeding breaks; but, inasmuch as it embodies some of the disputed points in milling, I desire to consider it separately in my next article. There still remains one point connected with wheat-cleaning worthy of consideration, and that is, "How far can the washing of wheat be carried to advantage?" The washing of wheat performs two functions, it cleans it and also tempers it for grinding in cases of hard varieties. The necessity of the washer for Indian wheats and others of similar variety, which are both filthy and hard, is now recognized as an absolute necessity. But whether it would prove profitable to wash all varieties of wheat is still an undemonstrated problem.

If soft wheats are washed, it must be by a process that would give the wheat an instantaneous but very severe dash through the water, giving it no time to absorb moisture to any extent, and then by the use of strong air currents to evaporate or expel the surface water. I am of the opinion that Duluth and all varieties of hard spring wheat, as well as all other hard varieties, should be washed to produce the best results. In flour where a sufficiency of water exists a very effective device may be made for accomplishing this in the following manner: Let there be arranged a small rotary hydraulic pump, so that it will deliver its stream of water against a copper wire sieve. Then let the wheat be delivered into the water at the point of exit from the pump; this will carry the wheat against the sieve, the water passing through, and the wheat dropping down over an inclined sieve for drainage. Thence let it pass into an atmospheric elevating spout in which a sufficient suction is applied to elevate the wheat to the top of the mill, during which time it is being dried by the rapid air current; from there spout to wheat-bin for tempering. By this process the wheat would not be in the water over one or two seconds, and only a sufficiency of water would remain in the bran to toughen it, without affecting in any manner the gluten or starch; and if it did not so affect the wheat, and at the same time insured a better color of flour, it then becomes a question as to whether or not all wheats, except those which are very damp, can not be improved by a system of instantaneous washing. I am inclined to believe they can.

Dry bran pulverizes into fine particles by the scraping action of rolls; damp bran does not so much. And if we can



dampen the bran evenly and with so limited a quantity of water as not to affect the inner berry, we necessarily insure a broader bran and whiter flour from the breaks. The process I mention being instantaneous, every berry is alike affected, which gives it a double advantage over the dampening process, that of perfect uniformity to dampen, to

which must be added the benefit derived from washing. The question is an undecided one; time and experience alone will demonstrate whether or not I am right in my prediction, that ultimately all wheats, soft and hard, except those very damp and fresh from the thresher, will be washed before milling.—*London "Millers' Gazette."*

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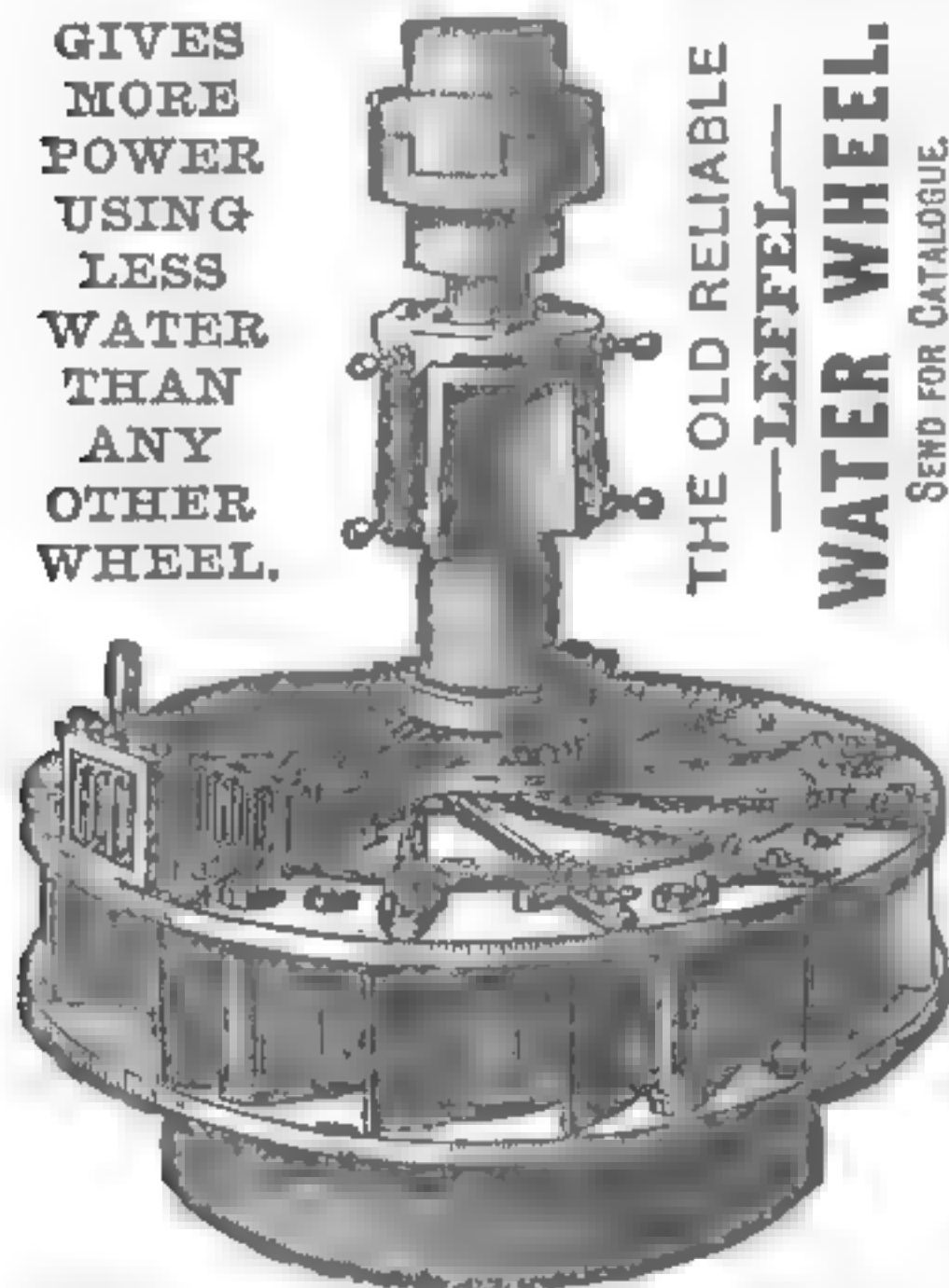
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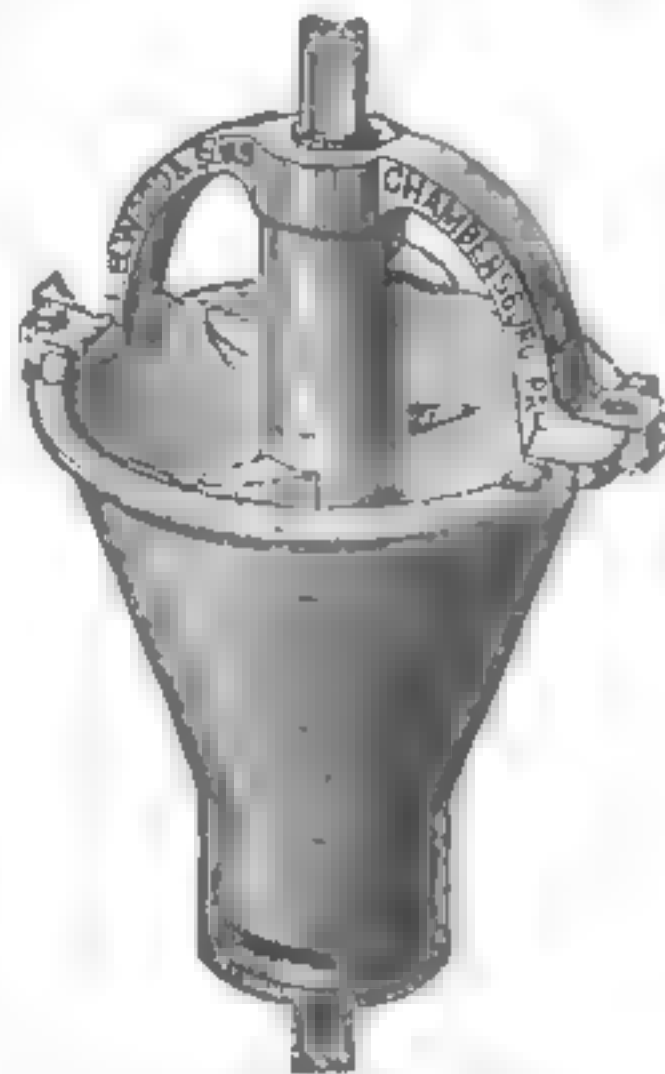
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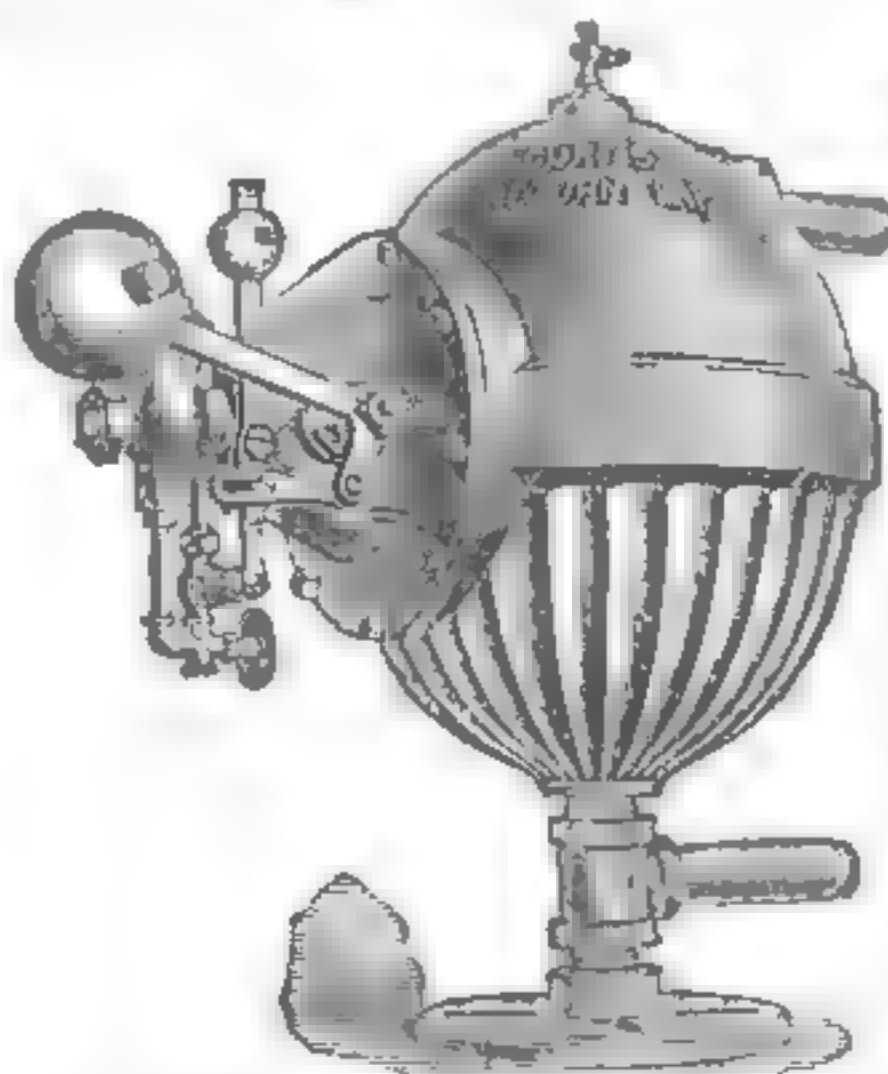
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### GENERAL AGENCIES.

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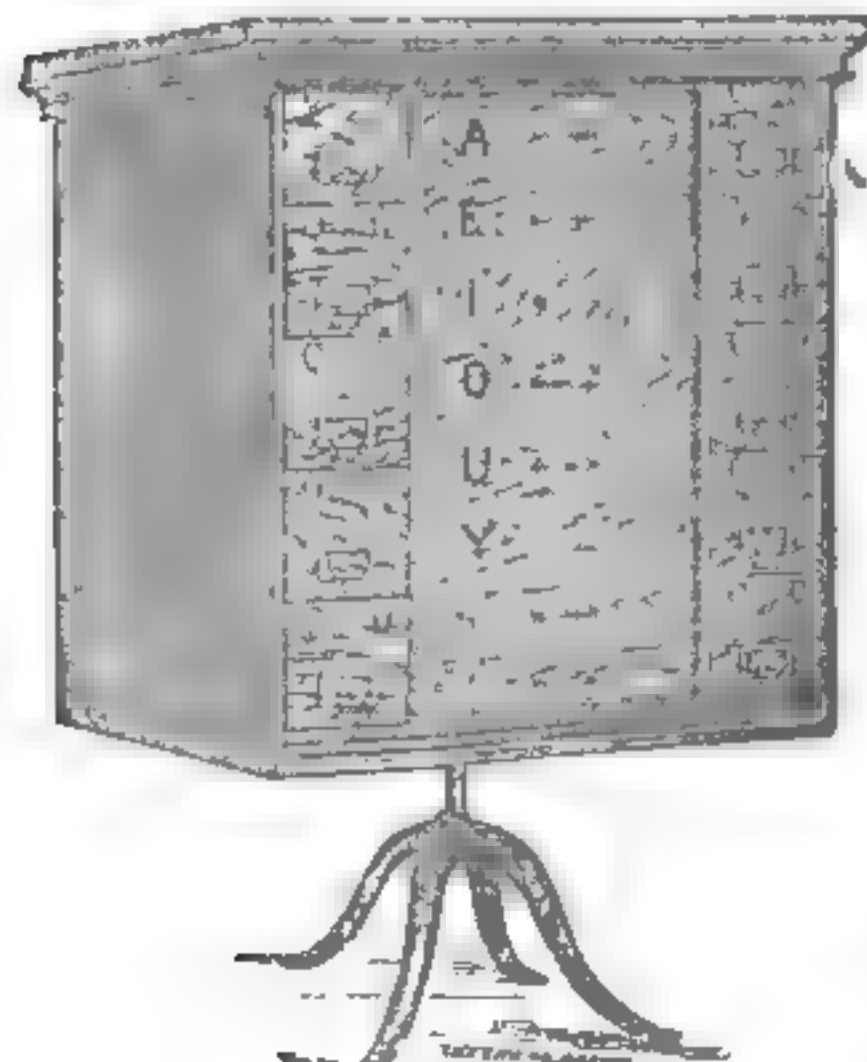
The New Buckeye Document Case & Letter File; Also All Kinds Office Furniture

**NO. 8** Represents one side of one of our Revolving Cabinet Letter Files and Document Cases Combined. It contains 30 Document Drawers and 8 Letter File Drawers. In filing letters we use first VOWEL of name on front of drawer, and LETTER FOLLOWING first VOWEL on Index Sheet within drawer. We also make more exhaustive systems which contain from 6 to 100 or more Filing Drawers.

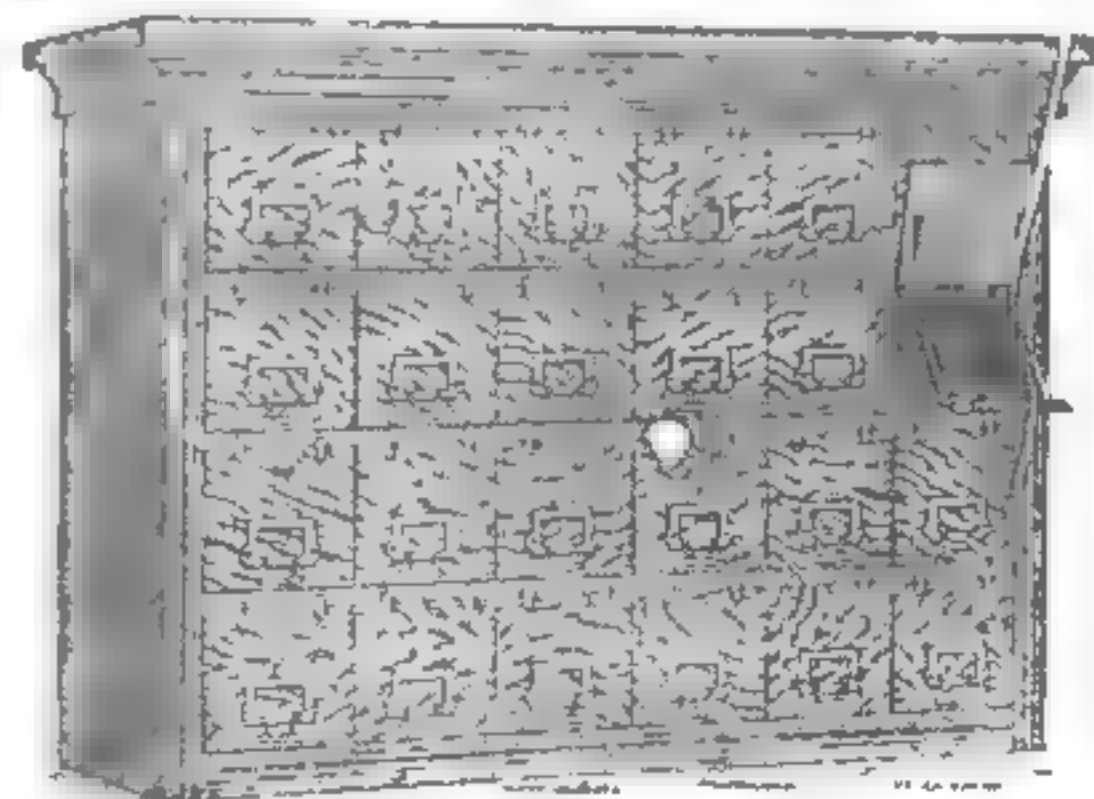
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NO. 8.



NO. 1.



# NOTES & NEWS

R. D. & F. Robert's flour-mill, Monticello, Ind., burned; loss \$40,000 insurance \$11,000; fire started from a dust explosion near the purifiers.

Donahue & Henderson's flour-mill, Vermillion, S. D., burned; loss \$15,000; no insurance.

The millers of this country are asked to contribute to a fund of \$5,000 for the family of Mr. E. N. LaCroix, the inventor of the middlings-purifier. Nothing that millers could do would be more praiseworthy or fitting than this well-earned tribute.

The National Pulley Covering Co., of Baltimore, Md., have recently received their third order for their "Patent Friction Covering" for pulleys from the Boone Mill Co., Greenwood, Fla., and their fourth from D. J. C. Arnold, manufacturer of brick machines, Newfoundland, Ohio, the latter informing them of the very successful use on the tight and loose pulleys of his machines, it adding very much to their effectiveness and success.

The case of Roberts against the Foos Mfg. Co., of Springfield, O., which has been pending for some time, has been decided in favor of the Foos Co. The decision declares Mr. Winchell, who is one of the firm of Foos Mfg. Co., to be the inventor of an initial breaking-device on feed-mills to break or crush ear corn before it enters the grinding-plates. This suit is closely connected with other suits which the Foos Mfg. Co. are now bringing against parties using a similar breaker on feed-mills, and the company feel elated over their victory. As it is plain the initial breakers are necessary to a feed-mill, and as the Foos Mfg. Co. have been declared the owner and original inventor of this device, they intend to maintain their rights against all infringements.

The Metropolitan Electric Light Co. operates a number of large central stations in the City of London, England. One was recently equipped with an outfit of

4-14 & 24 x 14, Westinghouse Compound Engines.  
2-10 & 18 x 10, " " "  
1-12 & 20 x 12, " " "

Another station operated in the same city by the same company is equipped with single-acting engines of English make. Quite a good-natured rivalry exists, of course, between the men who are in charge of these stations. Recently the American engines were put through their paces by British experts, on behalf of the Metropolitan Company, in a test lasting twelve hours without intermission. It was amusing to see the interest taken in the test by the American colony in London, many members of which spent the greater part of the day in the station. Even our respected Minister Plenipotentiary and Envoy Extraordinary, Mr. Lincoln, was on hand to see the American Eagle properly comforted and encouraged in its hour of trial. Being called away on important business, he returned at a later hour, in order to make sure that American interests and American dignity were being properly upheld. The engines in question are running regularly under a very heavy service, and the experts subjected them to many severe tests during the day; but they behaved so splendidly in all respects that the Englishmen were agreeably surprised. Some of the Americans who took such a lively interest in this test really know very little about steam-engineering, but they were wildly enthusiastic at the way in which these engines upheld America's reputation for good machinery in London. Already orders have been sent to The Westinghouse Machine Company at Pittsburgh for

1-18 & 30 x 16, Westinghouse Compound Engine.  
1-14 & 24 x 14, " " "  
1-10 & 18 x 10, " " "  
1-9 & 15 x 9, " " "

for the same London station, so that it is fair to assume that this type of engine is giving satisfaction in the "tight little Isle." There are also vague rumors afloat, that the other London station of the Metropolitan Company, which is now equipped with English engines, will soon be supplied with Westinghouse Compound Engines from Pittsburgh.

## BOOKS AND PAMPHLETS.

The leading paper for *Good Housekeeping*, No. 126, will be devoted to the subject of "The Etiquette of Dining and Dinner Giving," the details being gathered from conversations with George W. Childs, whose elegant hospitality is well known, not only throughout our own country, but widely in the world at large. This paper will be accompanied by one describing the White House state dinners, the code of etiquette established on the occasion of the first state dinner, which was given by President Washington, in May, 1789, in honor of the arrival of Mrs. Washington in New York, having been continuously adhered to by all the succeeding presidents, except in the exigencies of war, or other circumstances which prevented its adoption. This code of etiquette is carefully described, as are also the cards of invitation sent out and the menu prepared for the first state dinner of President and Mrs. Harrison, together with the precedent methods of seating the guests, table service and the after-dinner accomplishments. This paper is prepared by Mrs. L. B. Stelle of the Washington Woman's Press Association. To these papers will be added the full page illustration of the celebrated \$40,000 dinner set of Mrs. George W. Childs, also an illustration of the White House state dining-room and the President's private dining-room.

**PRACTICAL BLACKSMITHING.**—A collection of articles contributed at different times by skilled workmen to the columns of "The Blacksmith and Wheelwright," and covering nearly the whole range of blacksmithing, from the simplest to some of the most complex forgings. Compiled and edited by M. T. Richardson, Editor of "The Blacksmith and Wheelwright." Illustrated. Vol. II. Price \$1.00. M. T. Richardson, Publisher, New York. In Vol. I of this series the editor gave a brief account of the early history of blacksmithing, described many ancient and modern tools, with numerous plans of shops and the best method of building chimneys and constructing forges. The second volume opens with a brief treatise on the early history of iron and steel. Artistic iron work is then touched upon and the tests employed to show the strength of iron are given. The remainder of the volume is made up of illustrations of a great variety of tools for blacksmiths, many of them of special design and peculiar construction. An entire chapter is devoted to bolt and rivet clippers. Then there is a chapter on chisels, how to make and how to grind them. Another on drills and drilling; another on fullering and swaging, with numerous illustrations of special styles of fullers. There are two chapters on miscellaneous tools; another chapter on blacksmiths' shears, and a concluding chapter on emery-wheels and grindstones. Altogether the book contains 230 illustrations. Volume III, the editor announces, will give illustrations with descriptions of a great variety of jobs of work.

The midwinter (February) *Century* is notable among other things for the final instalment of the Lincoln biography. The chapters include the "Capture of Jefferson Davis," "The End of the Rebellion," and "Lincoln's Fame." Two poems on Lincoln follow the close of the life (one by Stuart Sterne and the other by James T. McKay), and supplementary papers on the "Pursuit and Capture of Jefferson Davis," by General Willson, who commanded the Union cavalry and by William P. Stedman, of Company B, who was an eye-witness. In the "Open Letter" department is an anecdote of Jefferson Davis, showing his indignation at the proposition to use concealed explosives in the coaling stations of the United States Navy. There are comments also in the "Open Letters" on the Lincoln History, one of which defines McClellan's political position. The Lincoln life has run through forty numbers of *The Century Magazine*. The frontispiece of the number is the enlargement of a small full-length photograph of Ralph Waldo Emerson, taken about 1859. As an accompaniment to this picture there is a striking paper made up of Emerson's talks with a college boy. In this number is begun the publication of the artist La Farge's letters from Japan, with illustrations prepared by the author. Two extremely timely papers are on what Milton calls "The Realm of Congo." The first describes a trip made by the United States Commissioner, Tisdell, in 1884, and the second gives an idea of the Congo River of to-day. The letter is written by E. J. Glave, one of Stanley's former officers. Recent visitors to the French capital will be especially interested in Miss Balch's account, called "A Corner of Old Paris," of a visit to the Musée des Archives. In the way of timely discussion, nothing could be more to the point than Professor Thorpe's paper in which he gives his reasons for thinking that Washington and Montana have made a mistake in their Constitutions; and Commissioner Roosevelt's defense of the Merit System versus the Patronage System. Joseph Jefferson devotes a large part of the current instalment of his autobiography to his reminiscences of Edwin Forrest. Professor Fisher, in the third paper of his series on "The Nature and Method of Revelation," describes the differentiating of Christianity from Judaism, and devotes a good deal of space to the work of the Apostle Paul. The fiction of the number consists of Mrs. Barr's "Friend Olivia," Mr. Stockton's "Merry Chanter," Mr. A. A. Hayes's "Laramie Jack," "How Sal Came Through," by Mr. Edwards, the author of "Two Runaways." Pictures of several newly discovered terra-cottas illustrate an article by Charles de Kay, entitled "A side Light on Greek Art." Among the poems of this number is a characteristic piece by James Whitcomb Riley, illustrated by Kemble, entitled "The Old Band." Other poems are by Richard Henry Stoddard, Orelia Key Bell, Walt Whitman, Clinton Scollard, S. M. Peck, Virginia F. Boyle and J. A. Macon. There are "Open Letters" on Base-Ball, and the New Croton Aqueduct, and editorials on "Further Electoral Reform," "The Fire-Risk," and "The New President of Columbia College."



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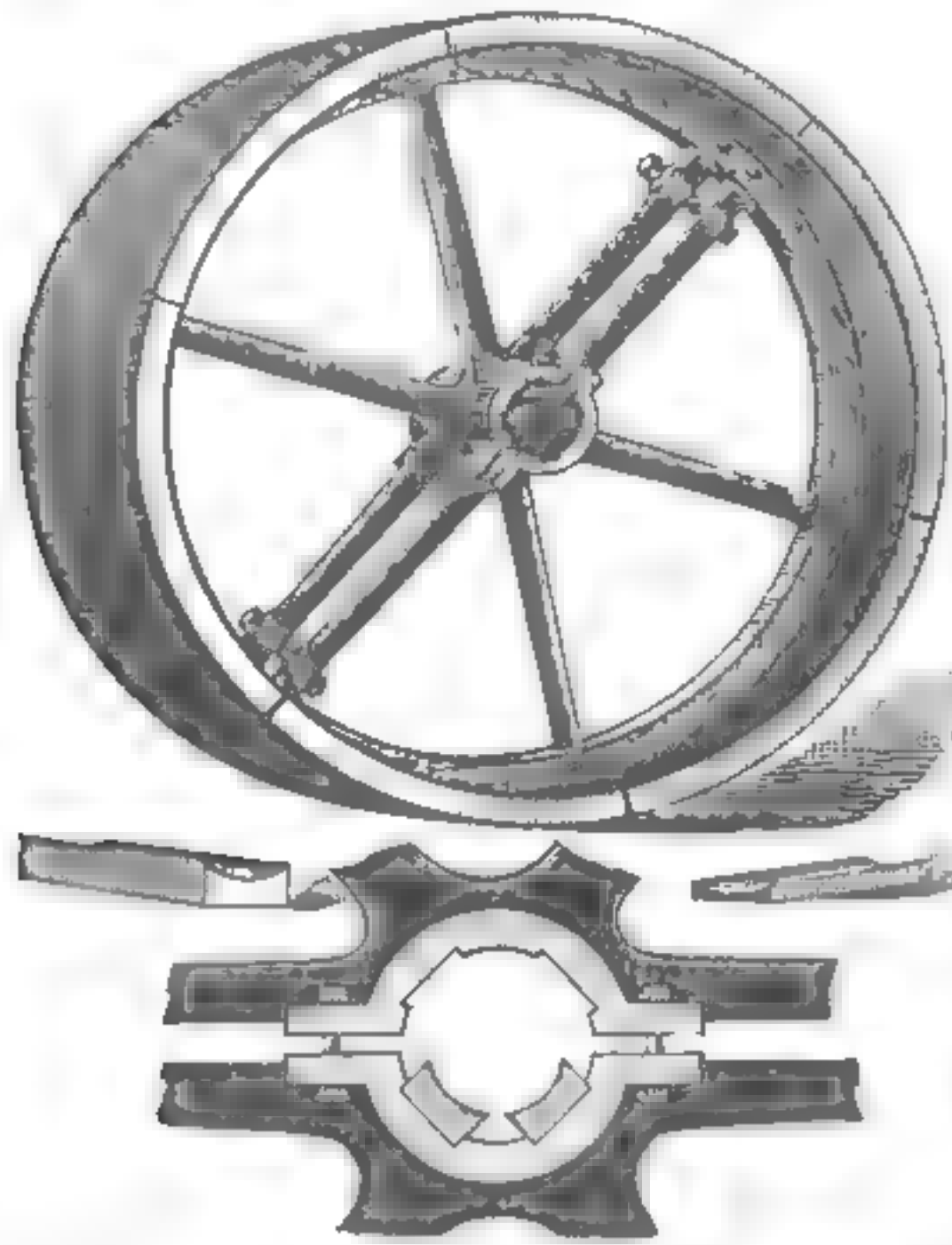
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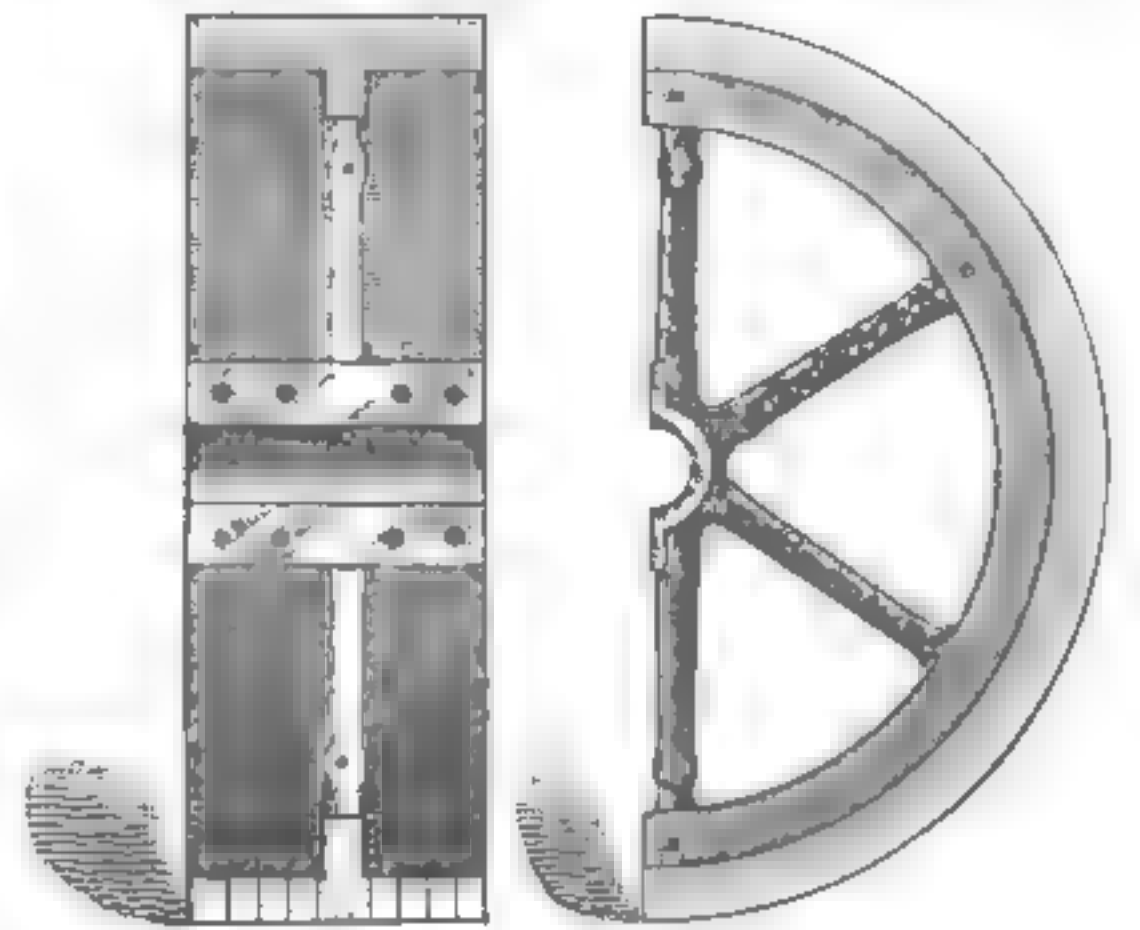
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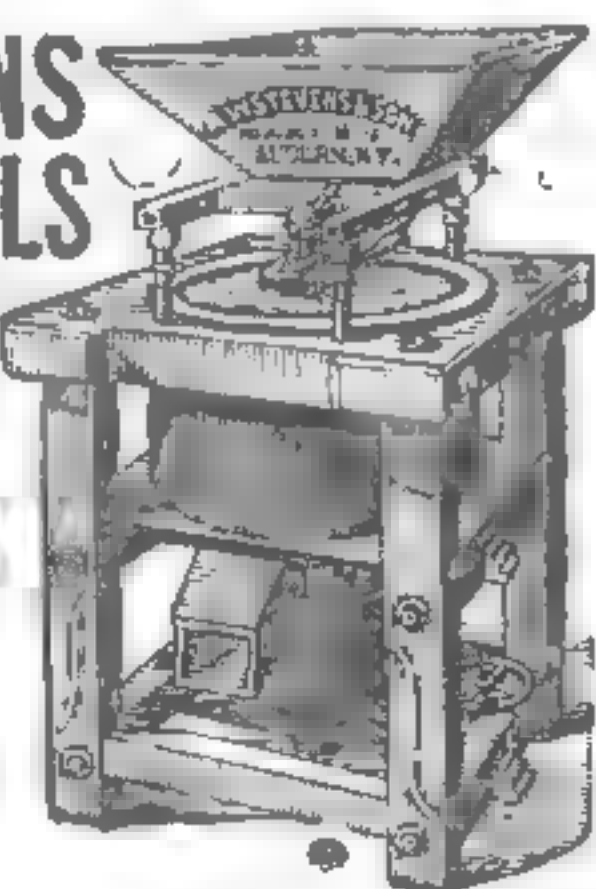
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Investigate the merits of the Reliance Safety Water Columns. It pays to keep posted. Many of the largest corporations have found it profitable to discard the old appliances and adopt these safeguards. There is always economy in safety. Send for illustrated price-list.

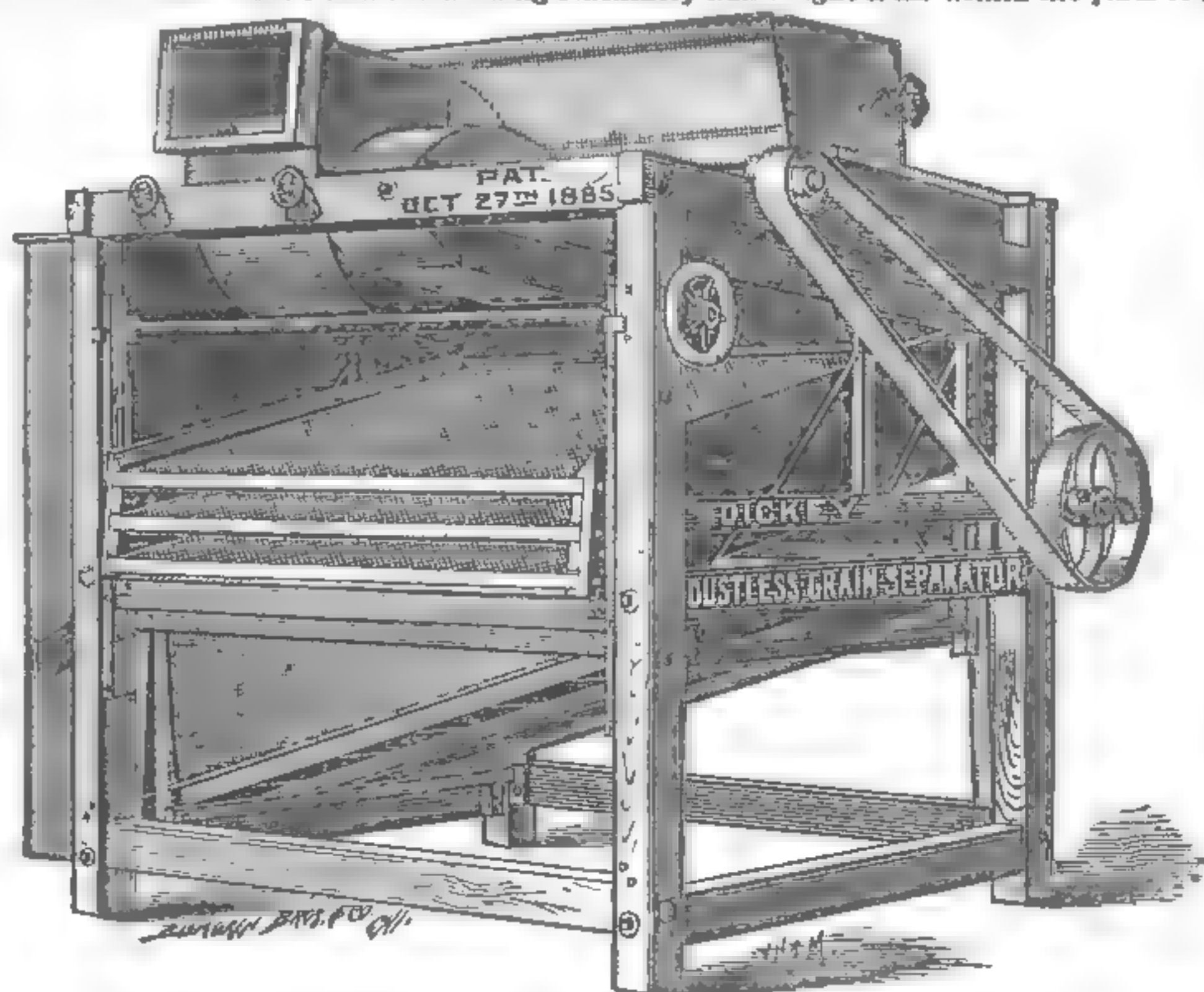
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This Separator is our latest and most perfect, and guaranteed to be the superior of any now on the market. This machine, as can be seen by the cut, is not a warehouse fanning mill with one patent attachment, but is Dustless Separator, made for the express purpose of thoroughly cleaning and separating all kinds of grain in large quantities; its construction is such that the working machinery and weight is all within the parts or anchors.

WE CLAIM FOR IT SUPERIORITY.



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We claim for it Superiority over everything of the kind made, in simpleness, durability, saving of power, capacity and cost of construction. Its height will accommodate any number of spouts from different points, without moving machine. They have a capacity from 700 to 1,500 bushels per hour. We also control exclusively the manufacture of the celebrated Dickey Giant, End and Side Shake, Warehouse Mills, that have attained such a world-wide reputation. Sent on approval to any reliable party. For full particulars address,

**A. P. DICKEY MANUFACTURING CO.,** Successors to Dickey & Pease, **RACINE, WIS.**



## EUROPEAN ECHOES.

RECENT letters from St. Petersburg report great scarcity of wheat in some provinces, and notably in the government of Sembirsk, where the peasants are eating bread made of a mixture of grass and oats, and the diet is said to have caused much sickness. There is an ample supply of wheat in the country, and insufficiency of internal communication is apparently the sole cause of this partial famine.

SAYS the London, England, "Agricultural Gazette": America has probably had her day as a wheat-exporting country—it has come sooner, even, than many of the most foreboding among us feared—and commenced the second stage of her flour-exporting era, which may considerably alter the milling industry as it now exists in Europe. During the first stage the wind-mills of old England fell into desuetude, and what will happen before the close of the second remains to be seen. So far as London is concerned, American red wheats are now seldom seen on the stands at Mark Lane, the quantities received being nearly all in parcels purchased by the town millers and sent direct to their mills; but American flour chokes the waterside warehouses and overflows into many country channels, not only in London but Liverpool, while Glasgow is the great mart for it in the north. Pacific coast flour is not salable in London; the cargoes generally find their way to the northwestern ports of England or to Ireland.

### POINTS IN MILLING.

WHILE grumbling about building and building materials, allow me to grumble directly at mill-owners who will insist on building, and at mill-builders who will take contracts for building, mills too dark for comfort or profit. Even in some "modern" mills I find that the owners either prefer darkness or do not understand the value of light in their mills. The other day I visited a new mill, and it was about the darkest and most dismal place I ever saw. There was hardly a place inside the walls where a person could see to read, even close to the windows, while every machine was veiled in darkness, even at the brightest hour in the day. It was difficult to tell a flour-packer from a middlings-purifier in the "dim religious light" that filled that mill and served to make the darkness visible.

THERE is no justification for making a mill so dark. Every possible thing to be said on the subject is against the darkness. Gloom is unhealthful for the miller, bad for the flour and favorable to the insect pests. In these midnight mills it is necessary to go poking lights everywhere, thus inviting "mysterious" fires and explosions. Make your building light, as light as possible. Build so as to secure fair light on the cloudiest days, and the bright days will take care of themselves.

ASIDE from the fustiness that seems to thrive on darkness, no miller can accurately tell the color of his flour in a dim or weak light. Flour that may look all right in the gloom will generally show surprising speckiness and yellowness when brought into a clear, strong light.

A MACHINE standing in a dark place may become disarranged or broken and go on for hours, spoiling flour by the barrel and eating up profit at a rapid rate, and the operator may not know what is the matter before he has ruined enough grain and flour to pay for lighting his mill thoroughly. A well-lighted mill is not likely to suffer losses of that kind.

### MILLING PATENTS.

Among the patents issued January 14, 1890, are the following:

Simon Bollinger, South Whitley, Ind., No. 419,176, a rotary grain-meter.

Robert S. Williams, Red Wing, Minn., No. 419,236, a flour-bolt, an improved machine comprising an outer cylinder, an inner cylinder divided transversely throughout its length

into zones of alternate perforate and imperforate material, said imperforate material having its inner surface roughened, and a rotary brush within the inner cylinder, the brushes being carried by a shaft and operating against the inner surface of the zones.

George E. D. Baldwin, Baltimore, Md., No. 419,238, a wheat-separator, an apparatus for separating wheat from garlic and other seeds, having a hopper with an overflow near the top and a constantly-open outlet of suitably-restricted size at the bottom, a pipe through which water is constantly delivered to the hopper to maintain an overflow, and a spout through which grain is constantly delivered to the hopper from above, whereby the heavy grain and water are caused to flow through the hopper in an unceasing stream and the light matters separated and floated away at the top.

John B. McCutcheon, Battle Creek, Mich., No. 419,281, a grain tally or register, comprising the combination, with the casing, the shaft or rod, the main operating lever and pawl, wheels mounted on said shaft and having numbers on their peripheries and projections or teeth on one side, and pawls pivoted to the opposite side of the wheels and adapted to engage the teeth or projections of the adjoining wheel, of disks between the numbered wheels for holding the pawls out of connection with the teeth of the adjacent wheel, said disks having a cut-away or recessed portion into which the pawls drop, whereby connection between adjoining wheels is established.

John M. Case, Columbus, O., No. 419,316, a dust-catching fan, assigned to the Case Manufacturing Company, same place. This dust-collector consists essentially of a setting-drum having axial openings for inlet and outlet of air, and a tangential opening for outlet of dust, suitable guards surrounding the axial openings and having tangential openings for the passage of air, and means for forcing air through the tangential openings of the upper guard, the tangential openings in the dust outlet and lower guard being arranged oppositely to those for the upper guard.

John M. Case, Columbus, O., No. 419,498, crushing-rolls, comprising the combination, with a fast-working roll having ridges, of the slow holding-roll having a dress provided with plain surface and ridges at intervals, forming berry-spaces for the lodgement of the berry while the ridges of the working roll operate thereon.

Thomas H. Tabor, Ellijay, Ga., No. 419,570, a corn-sheller.

The Railway Directory Publishing Co., 18 Cortlandt street, New York, N. Y., have issued *The Railroad, Telegraph and Steamship Builders' Directory* for 1890. This valuable work presents a classified list of manufacturers of railroad materials and supplies, car and locomotive builders' supplies, and all sorts of supplies for railroads, including a list of bridge-builders, steamship companies, horse car, electric light, stage and railroad ticket printers, and a large amount of information concerning the important industries which it represents. This is the only directory of its kind in existence. Firms desiring to obtain copies should correspond with the publishers. The work covers a great field and must prove valuable to all interested in that field.

Mr. John R. Tilley, who for several years past has represented British builders of machinery and steam-engines at Demerara, British Guiana, has severed his British and Scotch engine connections and has become the resident agent of The Westinghouse Machine Company, of Pittsburgh, for Demerara and the British West Indies. Mr. Tilley is a very able engineer.

### CATARRH.

CATARRHAL DEAFNESS—HAY FEVER.  
A NEW HOME TREATMENT.

Sufferers are not generally aware that these diseases are contagious, or that they are due to the presence of living parasites in the lining membrane of the nose and eustachian tubes. Microscopic research, however, has proved this to be a fact, and the result of this discovery is that a simple remedy has been formulated whereby catarrh, catarrhal deafness and hay fever are permanently cured in from one to three simple applications made at home by the patient once in two weeks.

N. B.—This treatment is not a snuff or an ointment; both have been discarded by reputable physicians as injurious. A pamphlet explaining this new treatment is sent free on receipt of stamp to pay postage, by A. H. Dixon & Son, 337 and 339 West King street, Toronto, Canada.—*Christian Advocate*.

Sufferers from Catarrhal troubles should carefully read the above.



**COMPOUND** Condensing or Non-Condensing.  
16 SIZES, 5 to 500 H. P.  
Not yet equaled by any form of Engine for  
**HIGH FUEL DUTY AND SIMPLICITY.**

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5 to 250 H. P.  
3000 in use in all parts of the Civilized World.

**JUNIOR** 6 Sizes in Stock,  
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An Automatic Engine cheaper than a Slide Valve.  
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Denver,	1330 Seventeenth St.	
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This cut represents a set of hanging cone pulleys. This pattern is intended for that class of machinery that stops and starts at the same speed, and at the same time be able to change the speed more or less while running. These cones are also fitted with a governor where a steady motion is required and the initial power is fluctuating. All sizes made from 1/2 Horse Power to 60 Horse Power. SEND FOR ILLUSTRATED CATALOGUE.



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**SHIPPERS**  
CAN SAVE TIME  
AND TROUBLE  
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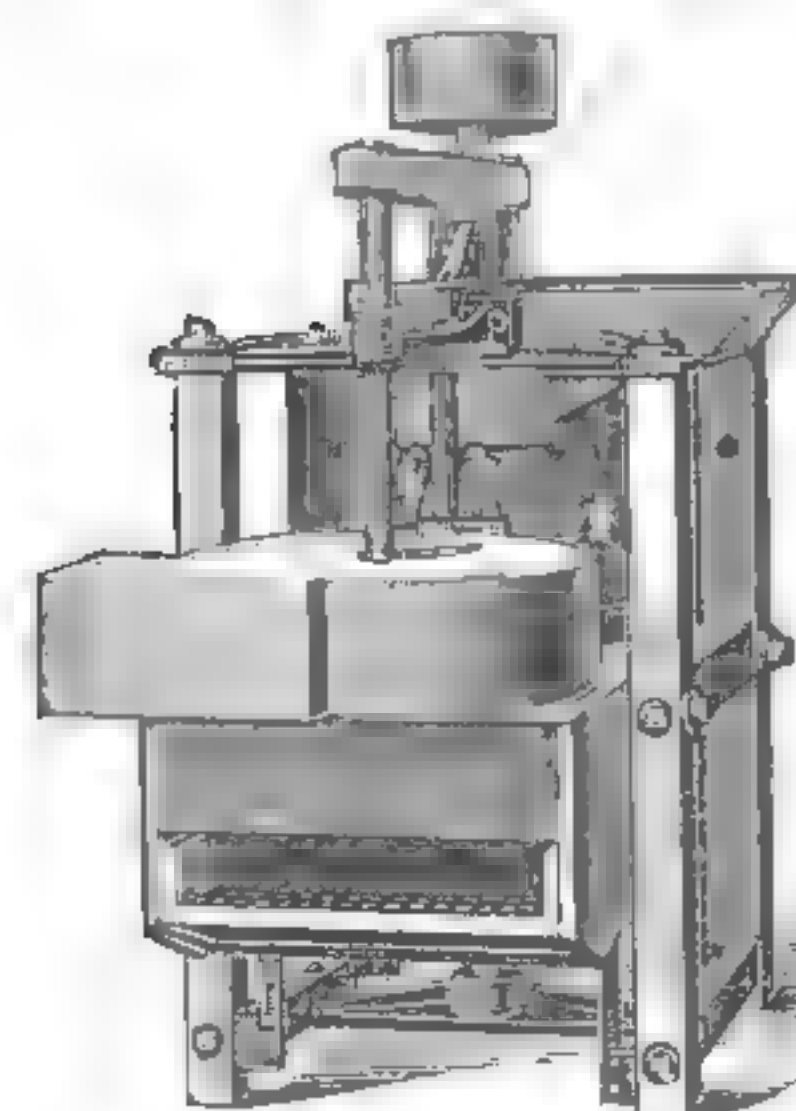
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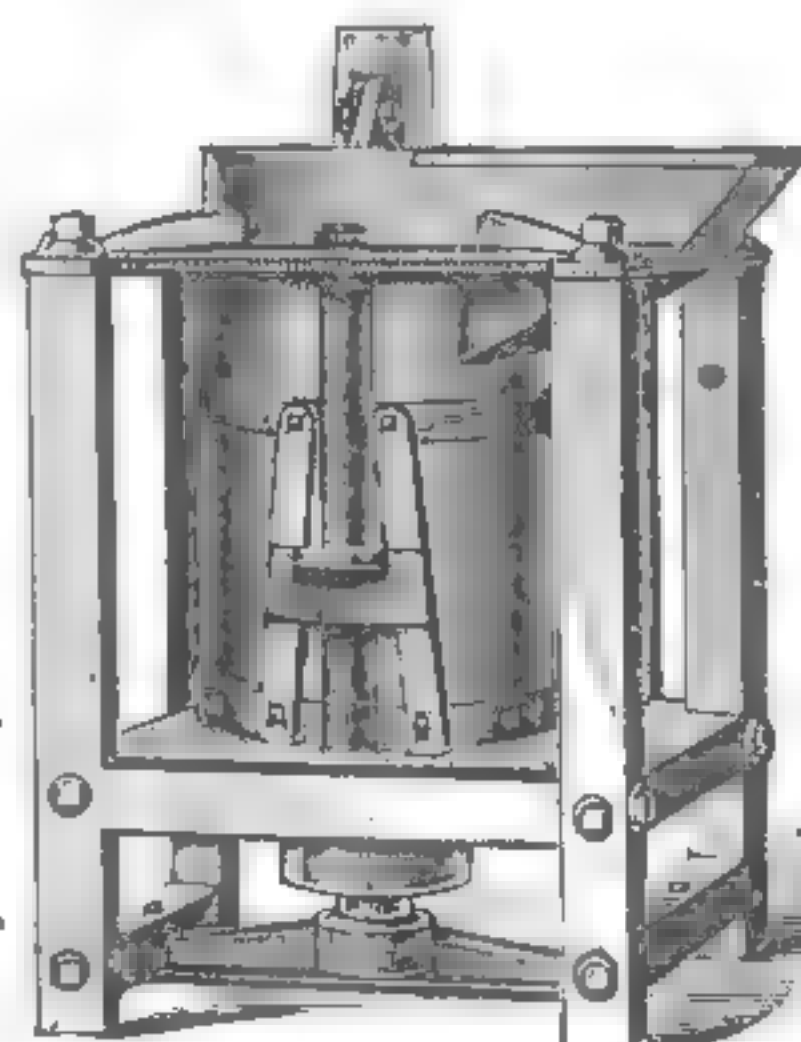
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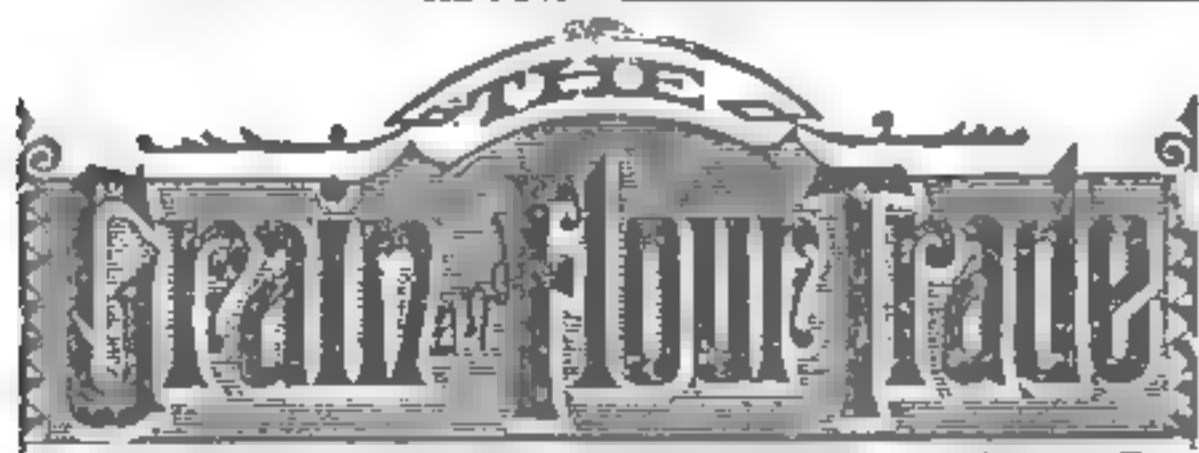


**THE HIGHEST CAPACITY for the LEAST MONEY.**  
**The Best Machines for Mills and Elevators.**  
**Machines Sent on Thirty Days' Trial.**  
**SHELL UNHUSKED CORN AND CLEAN IT PERFECTLY.**



**WRITE FOR ILLUSTRATED CIRCULAR WITH PRICES.**  
NAME THIS PAPER.





OFFICE OF THE MILLING WORLD,  
BUFFALO, N. Y., Feb. 1, 1890.

Friday of last week brought dull and weaker markets generally, on lack of short support and large receipts in the West. January wheat closed at 85½c., with Atlantic port receipts 25,982, exports 31,108, and options 4,200,000 bushels. January corn closed at 37½c., with receipts 455,963, exports 196,462, and options 432,000 bushels. January oats closed at 30¼c., with receipts 191,169, exports 30,854, and options 510,000 bushels. Wheat flour was duller, weaker, lower and more neglected than ever. Receipts were 11,246 sacks and 20,354 barrels, and exports 26,936 sacks and 37,487 barrels. The minor lines were featureless.

Saturday brought dull and easier markets all around, on short sellings and long realizations, in consequence of lower cables. January wheat closed at 85½c., with receipts 24,978, exports 38,410, and options 1,200,000 bushels. January corn closed at 37½c., with receipts 441,312, exports 347,684, and options 856,000 bushels. January oats closed at 30¼c., with receipts 118,659, exports 213,749, and options 500,000 bushels. Wheat flour was dull, dead and buried, with receipts 10,583 sacks and 22,549 barrels, and exports 2,900 sacks and 40,459 barrels. All the minor lines were unchanged.

Monday brought an increase in the unusual dullness and depression of the past week, on weaker cables and heavy sellings by longs and shorts. January wheat closed at 85½c., with receipts 25,333, exports 4,904, and options 1,900,000 bushels. January corn closed at 37½c., with receipts 545,219, exports 464,847, and options 1,100,000 bushels. January oats closed at 29¾c., with receipts 153,594, exports 20,226, and options 300,000 bushels. Wheat flour was stagnant and irregular. Receipts included 14,578 sacks and 44,202 barrels, and exports 300 sacks and 16,485 barrels. All the minor lines were featureless. The visible supply in the United States and Canada was as follows:

	1890.	1889.	1888.
Wheat.....	Jan. 25.	Jan. 26.	Jan. 28.
Corn.....	11,666,723	13,227,609	7,134,733
Oats.....	4,867,939	8,120,300	5,510,335
Rye.....	1,420,113	1,634,414	332,178
Barley.....	1,948,819	2,378,766	2,995,788

\*Exclusive of Kansas City this week.

Tuesday brought some strength and activity in wheat and and weakness and stagnation in other lines. January wheat closed at 86¼c., with receipts 33,139, exports 31,584, and options 4,160,000 bushels. January corn closed at 37c., with receipts 591,345, exports 105,832, and options 1,160,000 bushels. January oats closed at 29c., with receipts 201,134, exports 137,748, and options 340,000 bushels. Wheat flour was as dull and dead as usual. Receipts included 11,489 sacks and 35,371 barrels and exports 11,975 sacks and 10,149 barrels. The minor lines were featureless.

The following shows the amount of wheat and flour, together with the amount of corn on passage to United Kingdom, for ports of call or direct ports for the weeks mentioned:

	1890.	1889.
Wheat and flour, qrs....	Jan. 28.	Jan. 29.
Corn, qrs.....	2,083,000	2,470,000
	416,000	307,000

The following shows the amount of wheat and corn on passage to the Continent for the past week and for the same week last year:

	1890.	1889.
Wheat, qrs.....	Jan. 28.	Jan. 29.
Corn, qrs.....	404,000	377,000
	327,000	106,000

Shipments India wheat to U. K..... 70,000  
do do Continent.. 27,500

The imports into the United Kingdom for the past week and for the same weeks in previous years were as follows:

	1890.	1889.	1888.
Wheat, qrs.....	Jan. 28.	Jan. 23.	Jan. 31.
Corn, qrs.....	238,000	374,000	274,000
Flour, bbls.....	105,000	345,000	391,000
	92,000	216,000	162,000

Wednesday was a generally dull and easy day. January wheat closed at 85½c., with receipts 48,293, exports 10,633, and options 1,804,000 bushels. January corn closed at 37c., with receipts 408,341, exports 407,992, and options 720,000 bushels. January oats closed at 28¾c., with receipts 296,073, exports 16,464, and options 420,000 bushels. Wheat flour was dull and featureless, with receipts 15,076 sacks and 40,031 barrels, and exports 24,083 sacks and 8,298 barrels. The quotations were as follows:

#### SPRING FLOUR.

	Sacks.	Barrels.
No grade.....	\$1.25@1.40	\$....@....
Fine.....	1.40@1.70	1.60@2.00
Superfine.....	1.75@2.10	2.05@2.30
Extra No. 2.....	2.15@2.50	2.40@2.85
Extra No. 1.....	2.85@3.10	3.10@3.65
Clear.....	3.00@3.25	3.25@3.55
Straight.....	3.75@4.15	4.00@4.60
Patent.....	4.35@4.65	4.60@5.05

#### WINTER FLOUR.

	Sacks.	Barrels.
No grade.....	\$1.35@1.70	\$....@....
Fine.....	1.85@2.00	1.85@2.15
Superfine.....	1.85@2.15	2.00@2.40
Extra No. 2.....	2.25@2.70	2.55@2.90
Extra No. 1.....	2.75@3.40	2.85@3.65
Clear.....	3.10@3.50	3.40@3.90
Straight.....	3.65@3.90	4.05@4.75
Patent.....	3.95@4.20	4.35@4.80

#### CITY MILLS.

W. I. grades.....	4.20@4.35
Low grades.....	2.30@2.40
Patents.....	4.65@5.20

Buckwheat grain was neglected at 40@43c. Rye grain was dull at the following rates: No. 1 State, delivered, full loads, 37c. bid, 59c. asked; No. 2 Western, 56c. bid, 58c. asked; ungraded, 55@57c.; car lots, track, 54@55c. Barley was nominally unchanged, with buyers and sellers generally apart, and easier to sell. Quotations: Two rowed State 51@52c. for prime; six-rowed do 55@58c; extra No. 2 Canada 63@64c; No. 2 do 60@61c; ungraded do 60@70c; Western 50@56c. Malt was neglected and still nominal. Quotations: Canada country-made 75@80c; city 80@90c; six-rowed 75@80c; two-rowed 65@70c; Western 60@85c. Mill-feed was quoted steady, but it was not moving freely and stocks were accumulating again, with trade holding off. Quotations: 40-lb. 60@65c; 60 and 80-lb. 60@62½c; 100-lb. 70@75c; sharps 80@90c; rye 65c.

Buckwheat flour was easier at \$1.25@1.45. Rye flour was more active at \$2.90@3.10. Corn products were quiet at the following quotations: Coarse meal 74@75c; fine yellow 90@93c; fine white 90@95c. for old stock, new 5c. less; Brandywine \$2.65; Western and Southern \$2.50@ \$2.60.

Thursday brought no marked changes in the markets. January wheat closed at 84¾c., with receipts 8,250, exports 8,194, and options 6,280,000 bushels. January corn closed at 37½c., with receipts 200,000, exports 74,250, spot sales 204,000, and options 1,040,000 bushels. January oats closed at 28¾c., with receipts 184,000, spot sales 148,000, and options 315,000 bushels. Wheat flour was quiet, with receipts of 18,552 packages and sales of 18,600 packages. The other lines were unchanged and featureless.

Western millers complain of general dullness. Output is larger all the time than sales. Minneapolis turned out about 118,000 barrels of flour last week. The expected increase in exports fails to materialize. Reports from the winter-wheat regions indicate mild weather, no snow, the plant advanced almost to jointing, indications of insects plain, and all the conditions such as to make a sudden cold snap do great damage to the crop.

The City Flouring Mill, Muskegon, Mich., lost \$30,000 by fire; partially insured.

Voorhis Bros' flour-mill, Brookton, N. Y., burned; loss \$8,000; insured for \$4,000 in the Millers' Association.

#### BUFFALO MARKETS.

WHEAT—Very little was done in wheat to-day. No. 1 hard is nominally 91c., but some dealers say it can be bought for less. No. 1 Northern sold to-day at 88c. No. 2 red winter is held at 83½@84c. Some extra No. 3 red sold at 79½c. No. 2 white is held at 78½c. CORN—No. 3 Corn is quoted to-day at 32½@33c., and No. 2 yellow at 33½c. Only a few cars were sold and the market is firm at these figures. OATS—No. 2 white oats were held to-day at 27@27½c. Some were sold at 27½c. The tone of the market is easier. RYE—Quotations are nominal at 52@53c. on track, but there is no trading here. BARLEY—There is no change to report. No. 1 Canada is quoted at 65c.; No. 2 do at 58@61c., and No. 3 at 52@56c., but no sales are reported. The chief inquiry is for Western barley at 50c. or below, and not much for that. OATMEAL—Akron, \$6.00; Western, \$5.75 per bbl.; rolled oats, in cases, 72 lbs., \$3.25. CORNMEAL—Coarse, 80@85c.; fine, 85@90c.; granulated, \$1.50 per cwt.



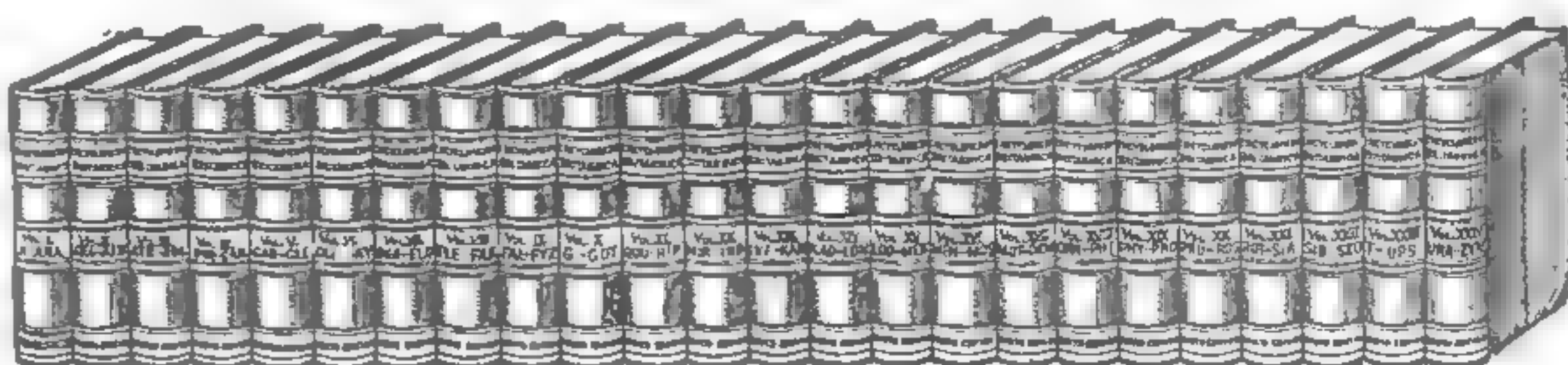
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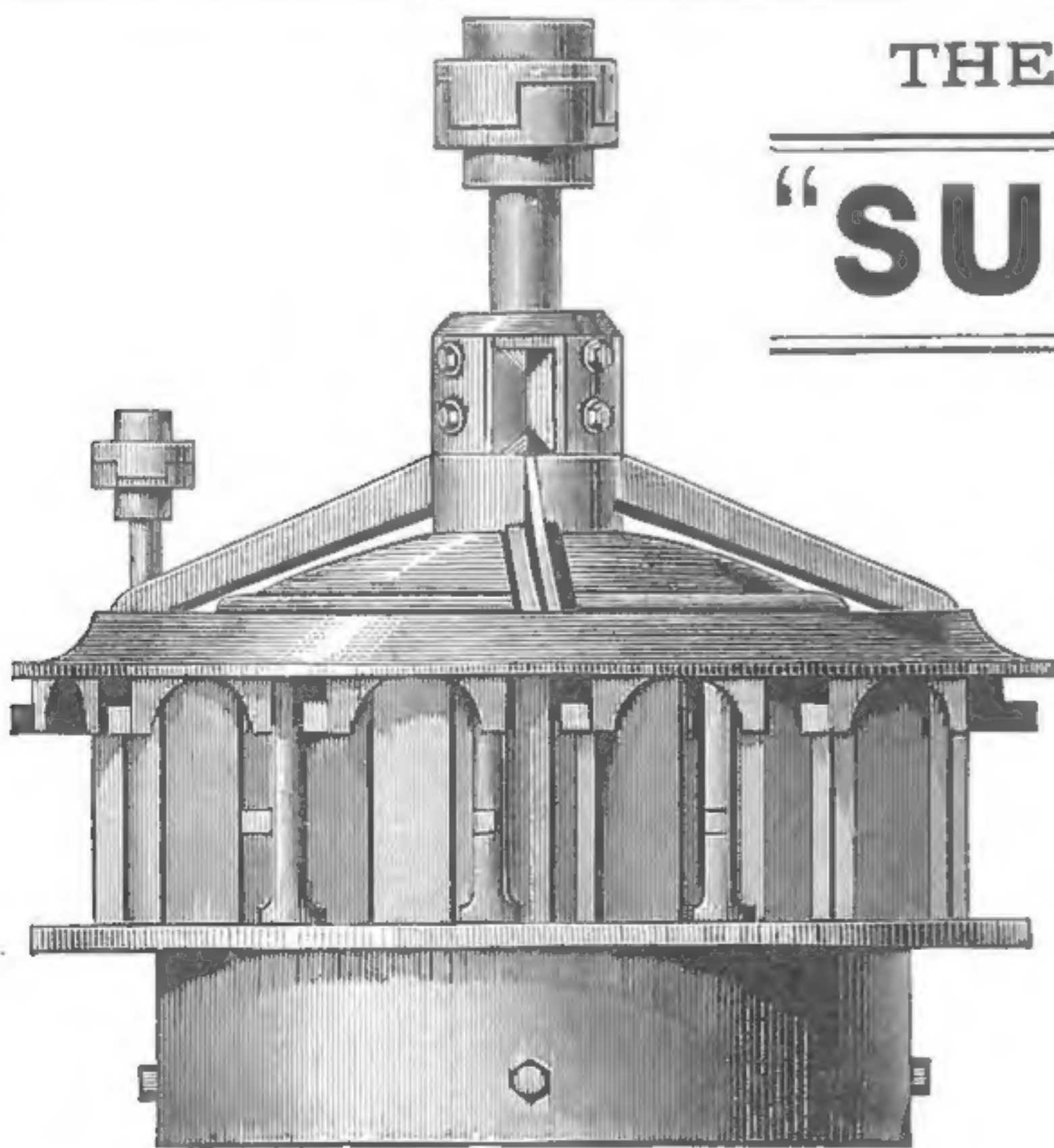
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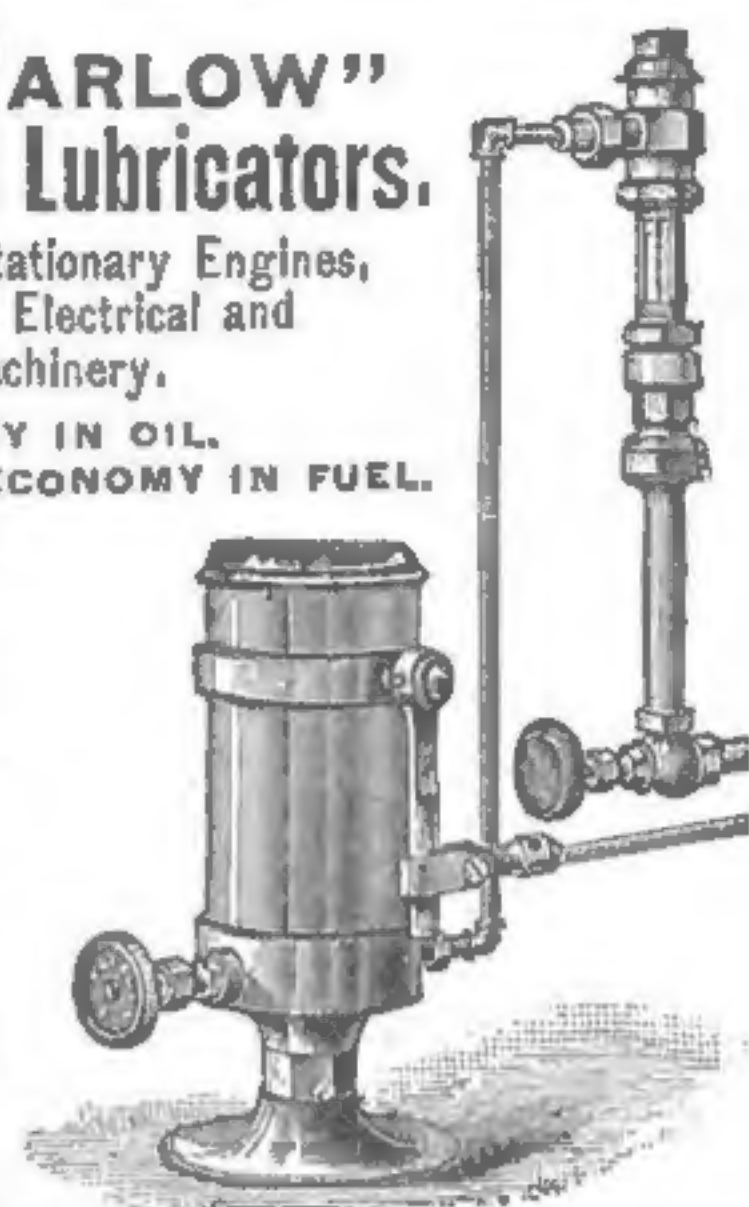
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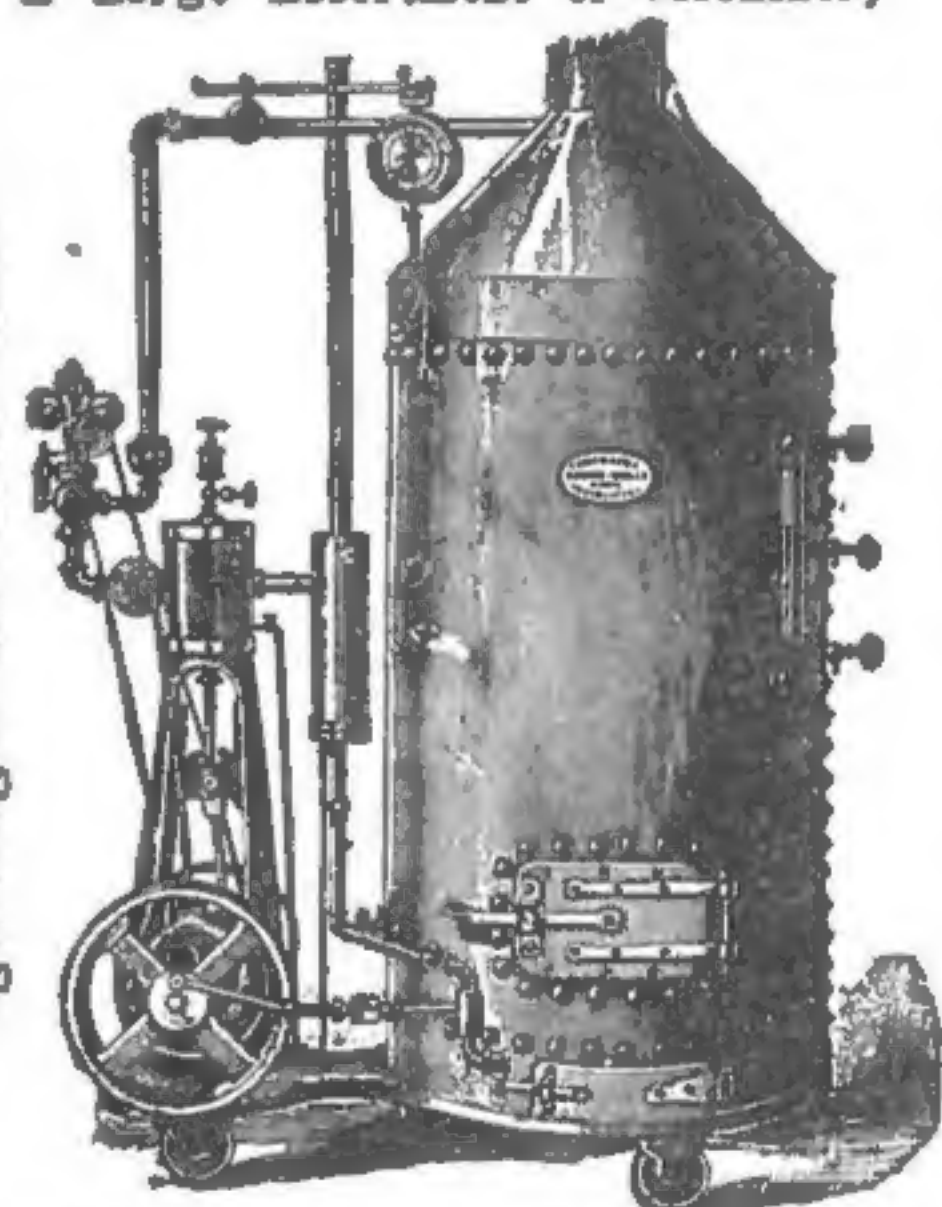
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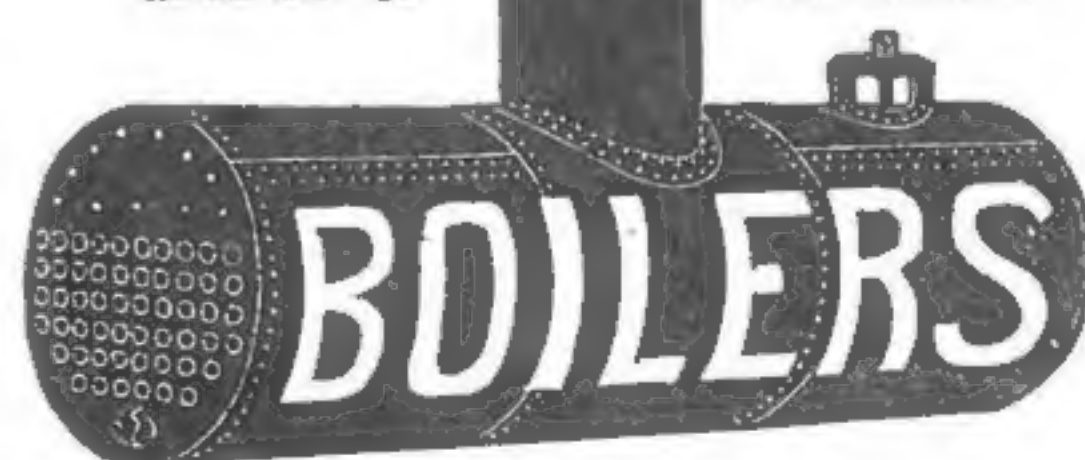
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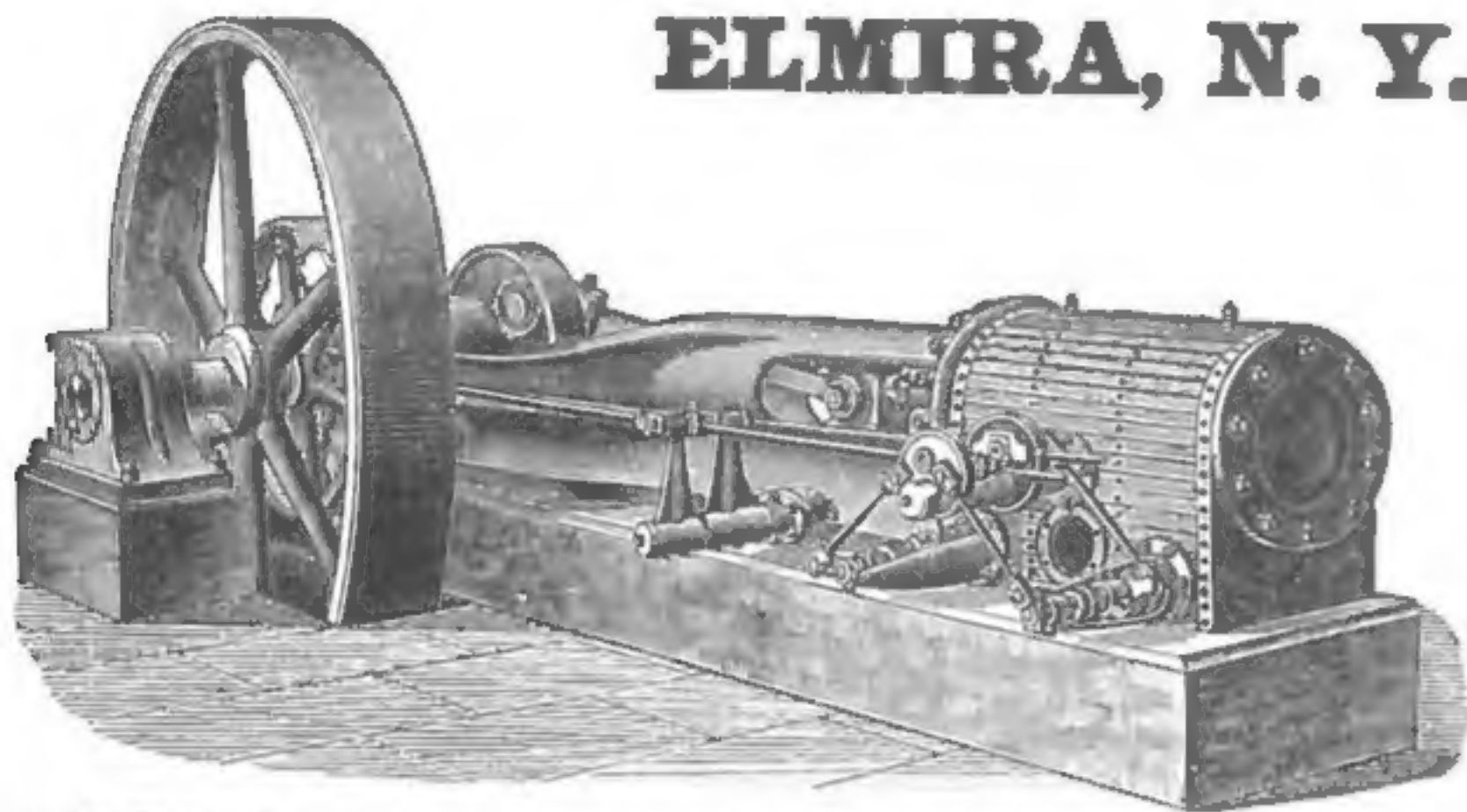


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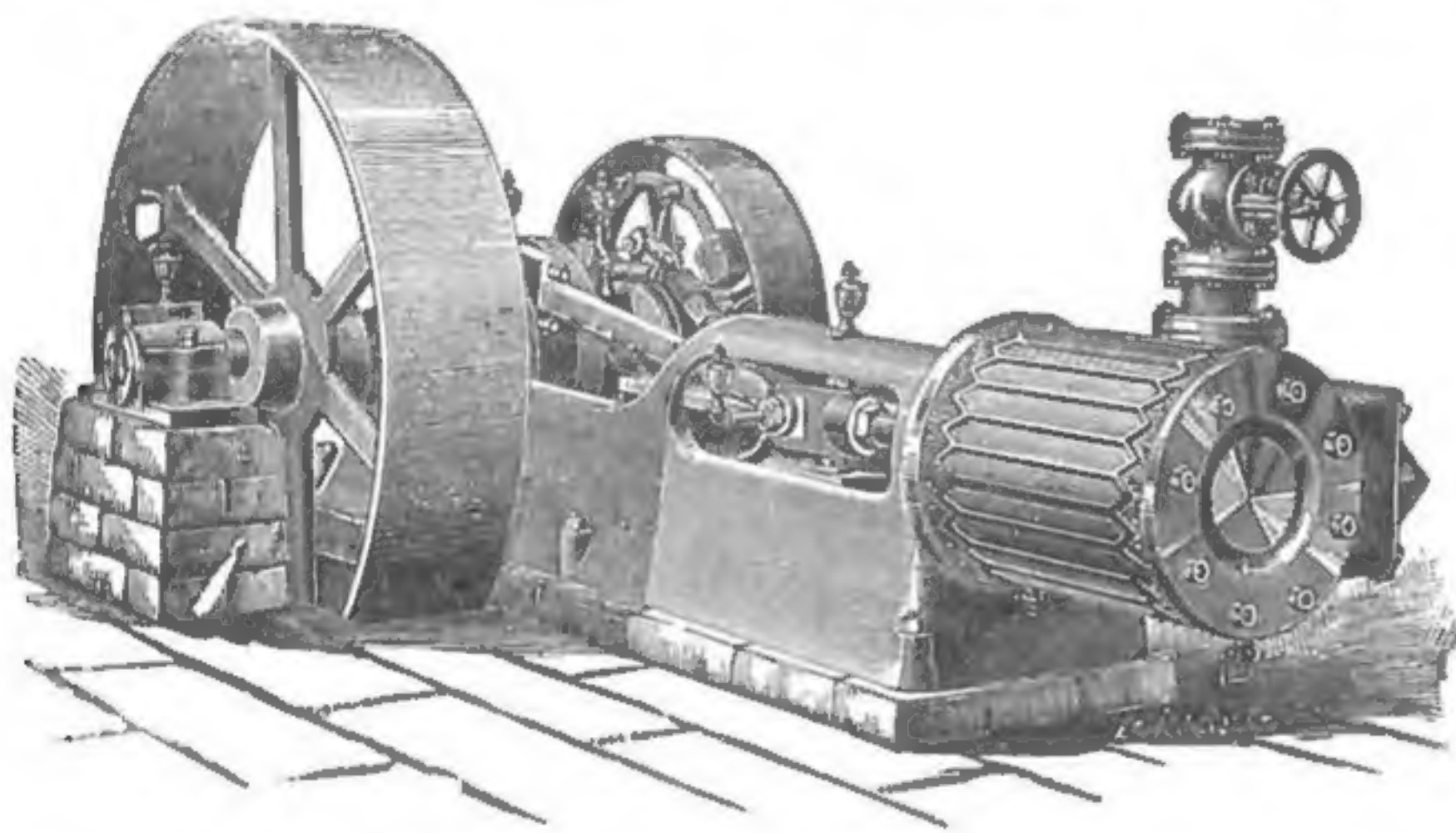
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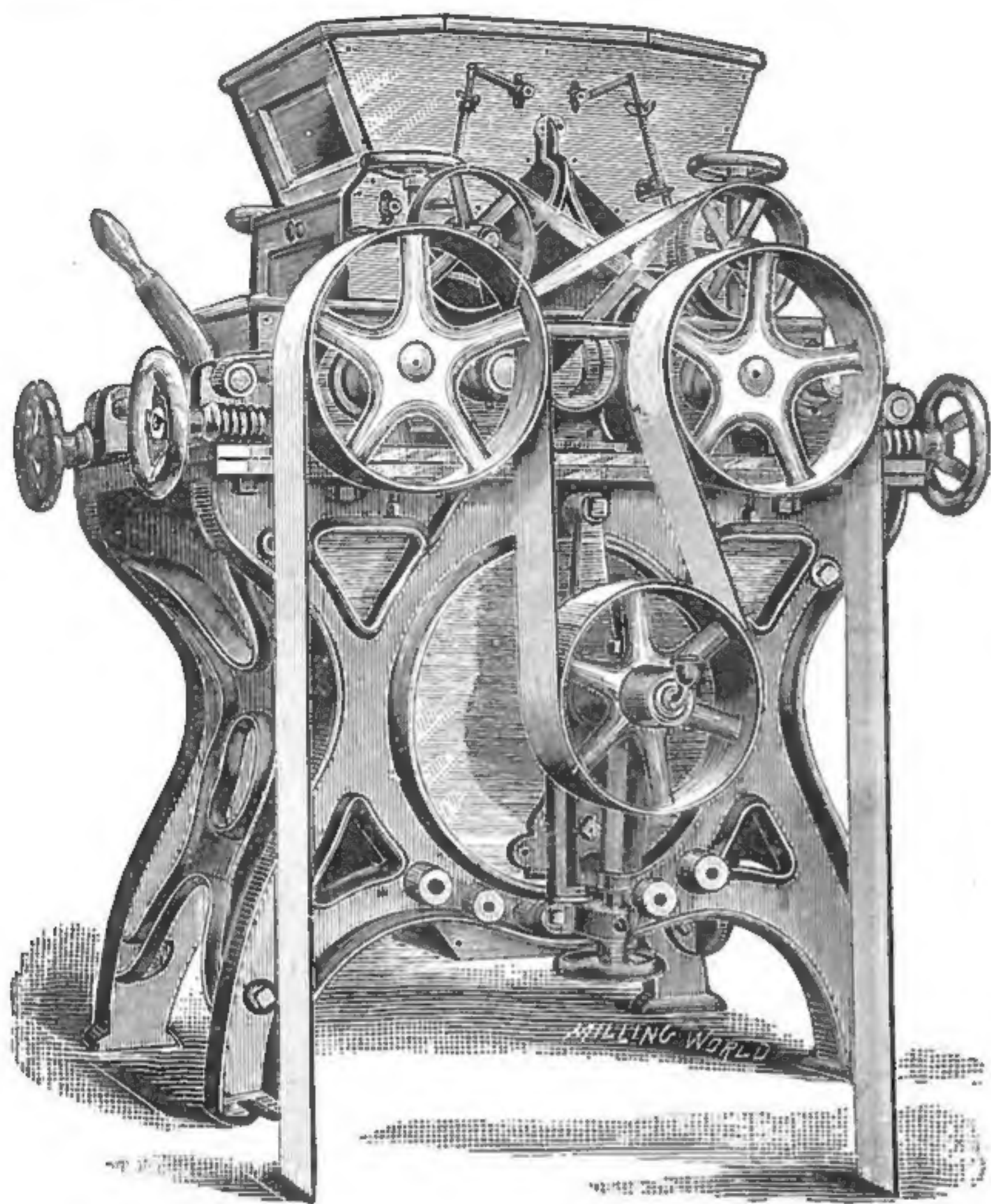
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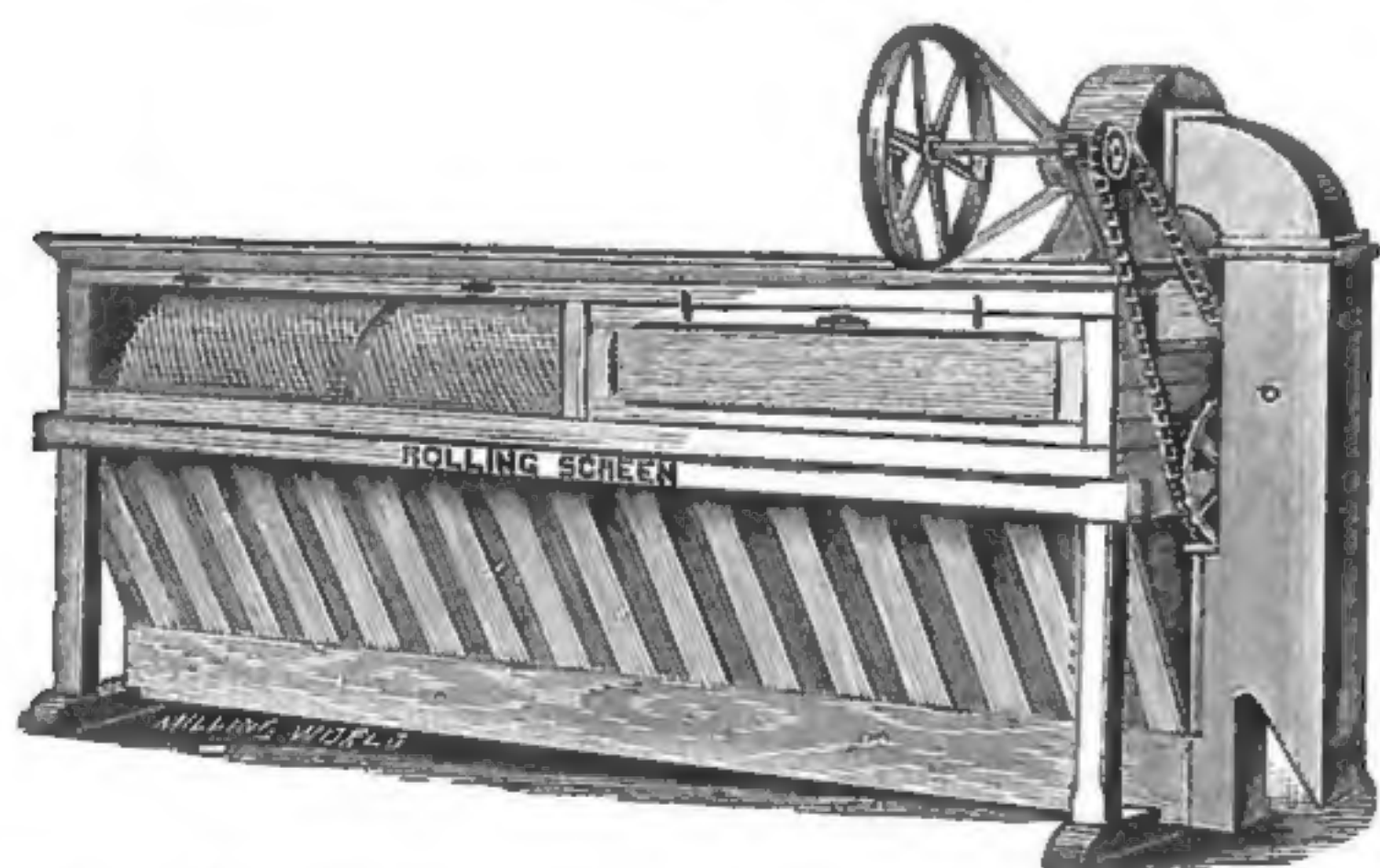
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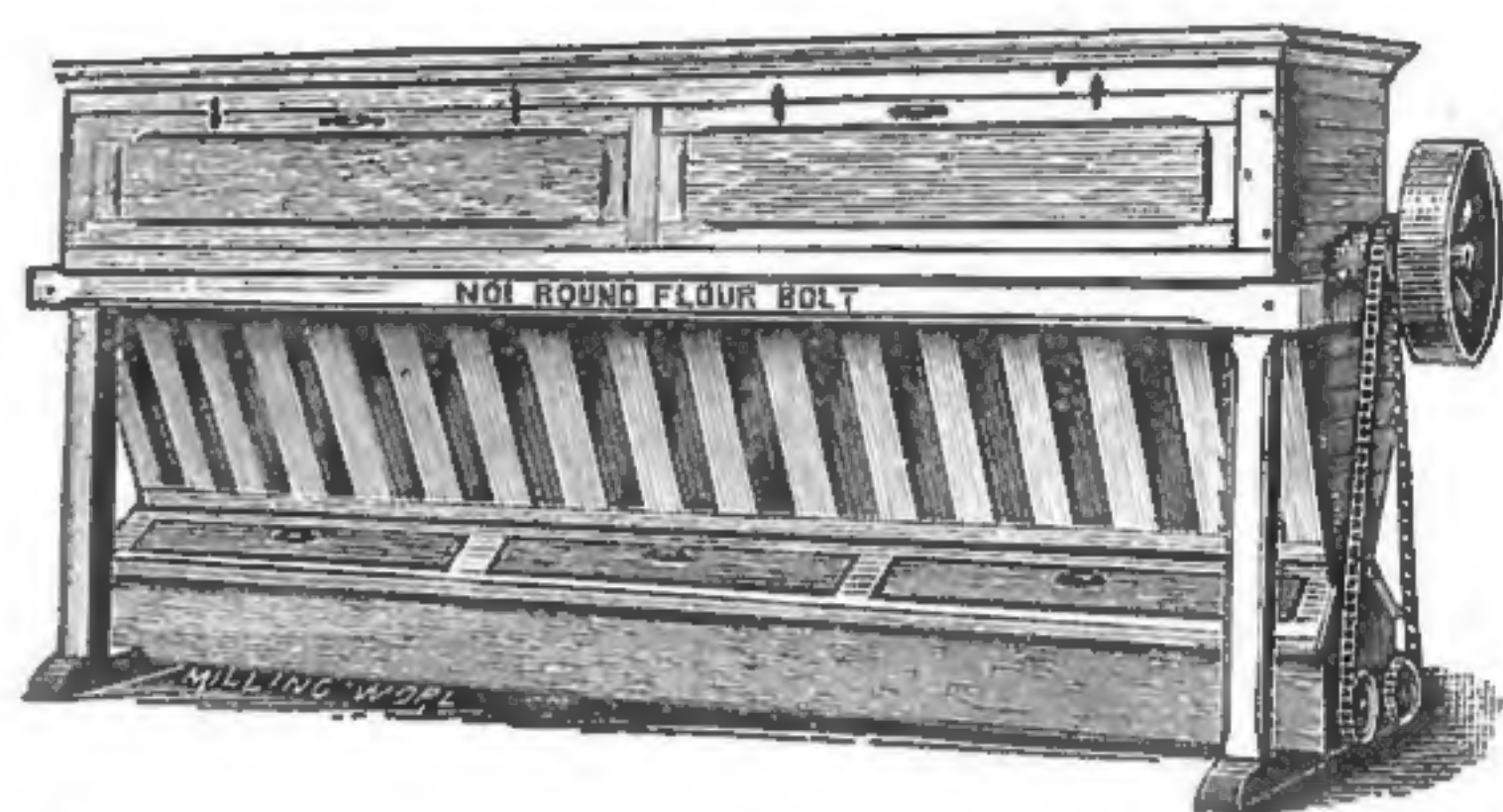
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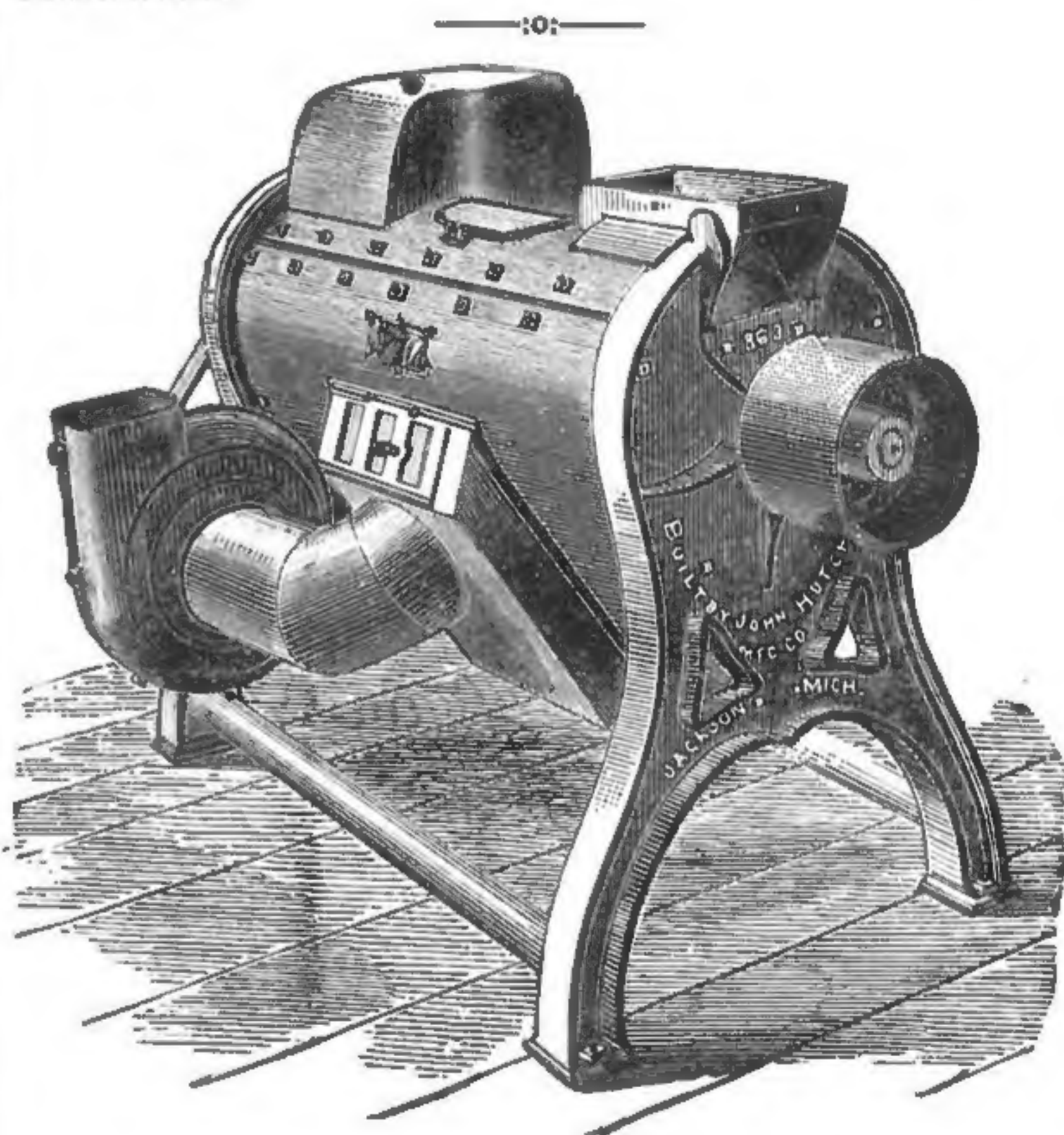


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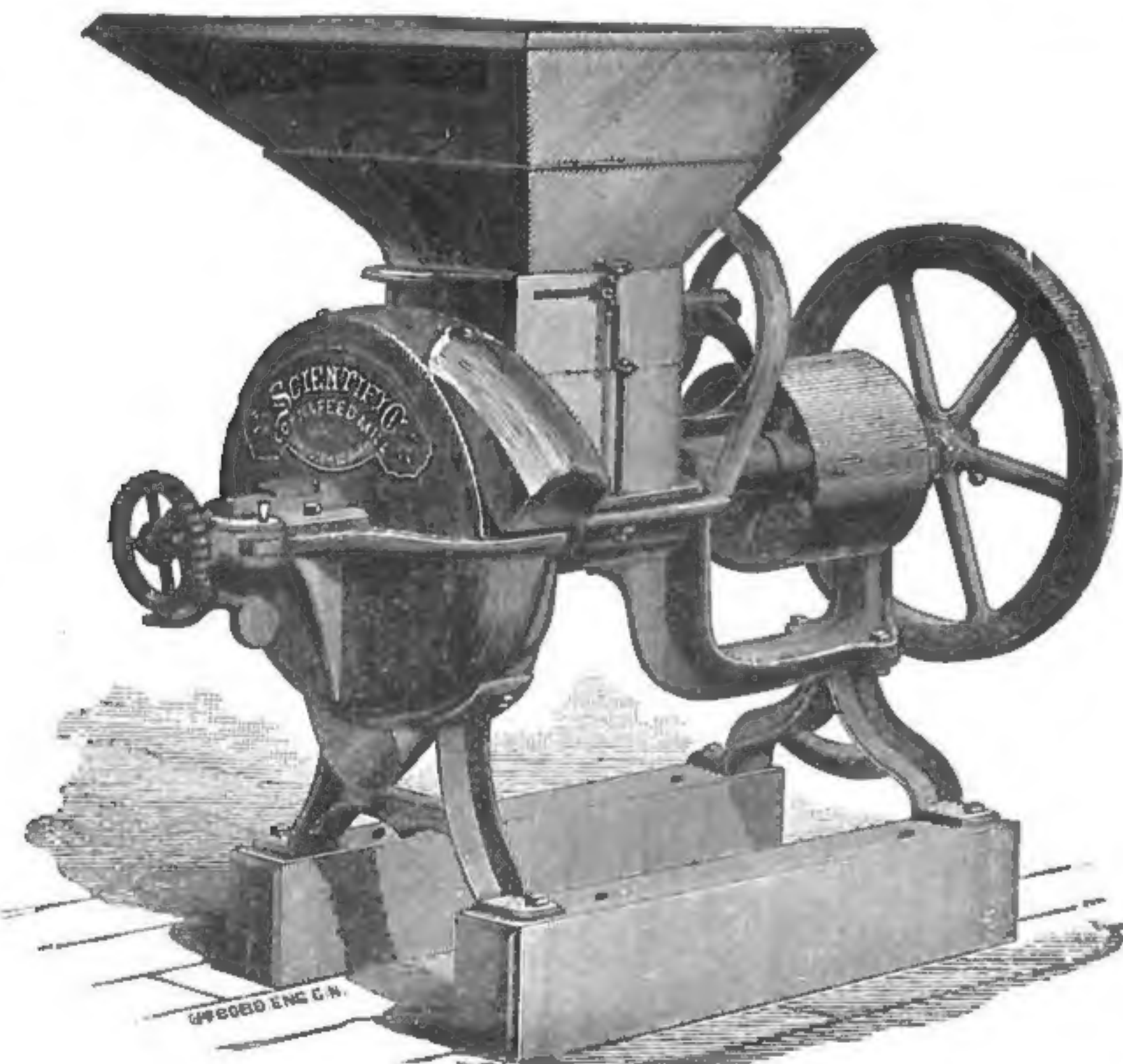
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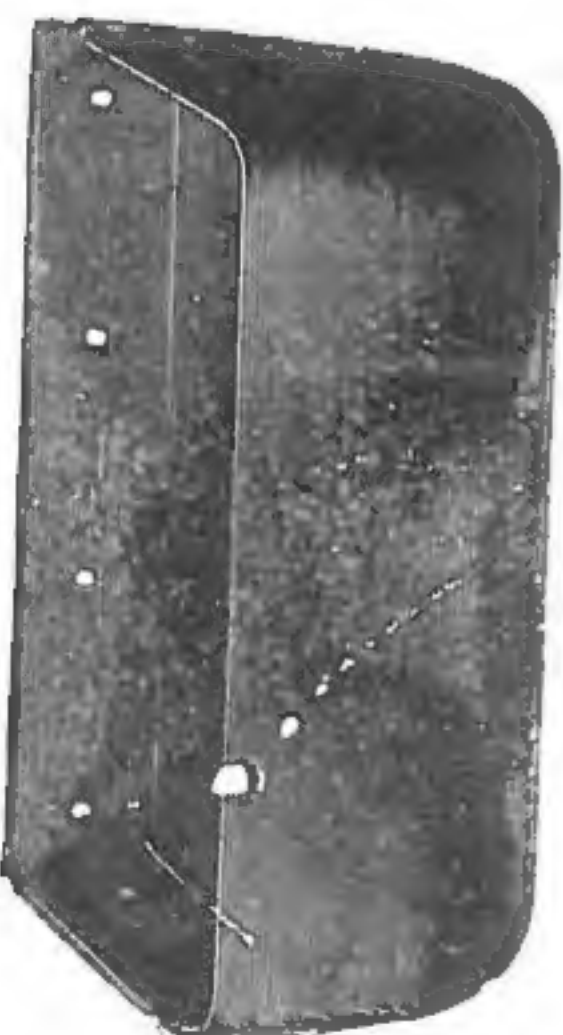
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